日本水產動植物圖集

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ILLUSTRATIONS OF JAPANESE AQUATIC PLANTS AND ANIMALS

VOLUM[illegible] TWO

大日本水產會編纂

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VOLUME TWO

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20 MAY 1937
OF VICTORIA

TOKYO
FISHERIES SOCIETY OF JAPAN
(DAI-NIHON SUISAN-KWAI)

1935

大日本水產會
發賣所
株式會社　北隆館

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MADE IN JAPAN

第五十一圖版 PL. LI

圖		Fig.	
一	モミジガヒ	1.	Astropecten scoparius (*Valenciennes*)
二	クロスジモミジガヒ	2.	Astropecten kagoshimensis (*de Loriol*)
三	アカヒトデ	3.	Certonardoa semiregulars (*Müller et Troschel*)
四	マボヤ	4.	Cynthia roretzi (*v. Drasche*)
五	カラスボヤ	5.	Cynthia karasboja (*Oka*)
六	ナマコ	6.	Stichopus japonicus (*Selenka*)
七	フジナマコ	7.	Holothuria monacaria (*Lesson*)
八	キンコ	8.	Cucumaria japonica (*Semper*)

第五十二圖版 PL. LII

一	ヤツデヒトデ	1.	Asterias calamaria *Gray*
二	キヒトデ	2.	Asterias versicolor *Sladen*
三	ハダカヒトデ	3.	Pseudarchaster pretiosus (*Doderlein*)
四	ムラサキモミジガヒ	4.	Astropecten ludwigi *De Loriol*
五	クモヒトデ	5.	Ophioplocus japonicus *H. L. Clark*
六	ツルボソテヅルモヅル	6.	Astrodendrum sagaminum (*Doderllein*)

第五十三圖版 PL. LIII

一	カシパン	1.	Laganum decagonalies *Less.*
二	タコノマクラ	2.	Clypeaster japonicus *Doderlein*
三	スカシカシパン	3.	Astrichypens manni *Verrill*
四	ブンブクチヤガマ	4.	Schizaster lacunosus (*Linné*)
五	バフンウニ	5.	Strongylocentrotus pulcherrimus (*A. Agassiz*)
六	ムラサキウニ	6.	Heliocidaris crassispina (*A. Agassiz*)
七	アカウニ	7.	Pseudocentrotus depressus (*A. Agassiz*)
八	ウミシダ	8.	Comanthus parvicirra (*J. Müller*)

第五十四圖版 PL. LIV

一、二	キメンガニ	1.2.	Dorippe dorsipes (*Linné*)
三	ツノナガコブシガニ	3.	Leucosides longifrons (*de Haan*)
四	テナガコブシガニ	4.	Persephora fugax (*Fabricius*)
五	トラフマンジユウ	5.	Calappa lophos (*Herbst*)
六	ヒシガタマンジユウ	6.	Mursia armata *de Haan*
七	ベニホシマンジユウ	7.	Liagore rubromaculatus *de Haan*
八	アサヒガニ	8.	Ranina ranina (*Linné*)

第五十五圖版 PL. LV

一	ヒラスナガニ	1.	Macrophthalmus depressus (*de Haan*)
二	イシガニ	2.	Charybdis sexdentata (*Herbst*)
三	イテフガニ	3.	Cancer japonicus *Ortmann*
四	ヒシガニ	4.	Parthenope laciniata (*de Haan*)
五	ズワイガニ	5.	Chionecetes phalangium (*Fabricius*)
六	モクズガニ	6.	Eriocheir japonicus *de Haan*
七	タカアシガニ	7.	Macrocheira kaempferi *de Haan*
八	オホクリガニ	8.	Erimacrus isenbeckii (*Brandt*)

第五十六圖版 PL. LVI

圖		Fig.	
一	アカテガニ	1.	Sesarma haematocheir (*de Haan*)
二	コシマガニ	2.	Paramithrax edwardsii *Ortmann*
三	サナダミズヒキガニ	3.	Latreillia valida *de Haan*
四	イシガニ	4.	Charybdis sexdentata (*Herbst*)
五	ノコギリガザミ	5.	Scylla serrata (*Forskål*)
六	ガザミ	6.	Portunus trituberculatus (*Miers*)
七	エンコウガニ	7.	Carcinoplax longimanus *de Haan*

第五十七圖版 PL. LVII

一	ケスジヤドカリ	1.	Pagurus arrosor (*Herbst*)
二	アカホシヤドカリ	2.	Pagurus diogenes *Fabricius*
三	イシダタミヤドカリ	3.	Pagurus setifer *Milne-Edwards*
四	エドワルヤドカリ	4.	Diogenes edwardsii (*de Haan*)
五	マツクワンガニ	5.	Birgus latro *Linné*
六	タラバガニ	6.	Paralithodes camschatica (*Tilesius*)

第五十八圖版 PL. LVIII

一	ハコエビ	1.	Linuparus trigonus (*de Haan*)
二	セミエビ	2.	Scyllarus haani *v. Siebold*
三	ウチハエビ	3.	Ibacus ciliatus *de Haan*
四	ザリガニ	4.	Cambaroides japonicus (*de Haan*)
五	アカザ	5.	Nephrops japonicus *Tapparone-Careri*

第五十九圖版 PL. LIX

一	テナガエビ	1.	Macrobrachium nipponense (*de Haan*)
二	モモイロエビ	2.	Pandalus hypsinotus *Brandt*
三	イセエビ	3.	Panulirus japonicus (*v. Siebold*)
四	サクラエビ	4.	Sergestes kishinouyei *Gordon et Terao*
五	シャウジャウエビ	5.	Sympasiphaea imperialis *Terao*

第六十圖版 PL. LX

一	クルマエビ	1.	Penaeus japonicus (*Bate*)
二	フトミゾエビ	2.	Penaeus latisulcatus *Kishinouye*
三	クマエビ	3.	Penaeus semisulcatus *de Haan*
四	ウシエビ	4.	Penaeus carinatus *Dana*
五	シバエビ	5.	Penaeus joyneri (*Miers*)
六	ヨシエビ	6.	Penaeopsis monoceros (*Fabricius*)
七	サルエビ	7.	Trachypenaeus curvirostris (*Stimpson*)

第六十一圖版 PL. LXI

一	エボシガヒ	1.	Lepas anatifera *Linné*
二	カメノテ	2.	Mittella mittella (*Linné*)
三	ツノカメノテ	3.	Scalpellum stearnsii *Pilsbry*
四	シロスヂフヂツボ	4.	Balanus amphitrita albicostatus *Darwin*
五	アカフヂツボ	5.	Balanus tintinabulum rosa *Pilsbry*
六	クロフヂツボ	6.	Tetraclita squamosa japonica *Pilsbry*
七	シヤコ	7.	Squilla oratoria *de Haan*
八	カブトガニ	8.	Tachypleus tridentatus *Leach*

第六十二圖版 PL. LXII

圖		Fig.	
一	イトヒキカラミジンコ	1.	Eucalanus attenuatus *Dana*
二	アカヒゲカラミジンコ	2.	Calanus plumchrus *Marukawa*
三	ビジンオイトナミジンコ	3.	Oithona plumifera *Baird*
四	ノコバケンミジンコ	4.	Cyclops serrulatus *Fischer*
五	ハリテモラミジンコ	5.	Temora stylifera *Dana*
六	ヒメパラカラミジンコ	6.	Paracalanus parvus *Claus*
七、八	メダマウミミジンコ	7,8.	Copilia mirabilis *Dana*
九、十	オトメカヒガラミジンコ	9,10.	Sapphirina augusta *Dana*
十一、十二	ミジンコ	11,12.	Daphnia morsei var, japonica *Ishikawa*
十三	ノロ	13.	Leptodora kindtii (*Focke*)
十四	スキシヤウアミ	14.	Euphausia pellucida *Dana*
十五	イサザアミ	15.	Neomysis isaza *Marukawa*
十六	イイジマアミ	16.	Anisomysis ijimai *Nakazawa*
十七	ワタセアミ	17.	Siriella watasei *Nakazawa*

第六十三圖版 PL. LXIII

一	カイダコ	1.	Argonauta argo *Linné*
二	フネダコ	2.	Argonauta hians *Solander*
三	テナガダコ	3.	Polypus variabilis *Sasaki*
四	イヒダコ	4.	Polypus fang-siano (*d'Orbigny*)
五	マダコ	4.	Polypus vulgaris (*Lamarck*)
六	スナダコ	6.	Polypus granulatus (*Lamarck*)

第六十四圖版 PL. LXIV

一	ミヽイカ	1.	Euprymna morsei *Verrill*
二	アホリイカ	2.	Sepioteuthis lesoniana *Férussac*
三	シリヤケイカ	3.	Sepiella japonica *Sasaki*
四	ハリイカ	4.	Sepia andreana *Steenstrup*
五	ヤリイカ	5.	Loligo bleekeri *Keferstein*
六	ケンサキイカ	6.	Loligo edulis *Hoyle*
七	スルメイカ	7.	Ommastrophes sloani pacifica *Steenstrup*

第六十五圖版 PL. LXV

一	バカイカ	1.	Stenoteuthis bartrami (*Lesueur*)
二	スジイカ	2.	Symplectoteuthis luminosa *Sasaki*
三	ベイカ	3.	Loligo beka *Sasaki*
四	コウイカ	4.	Sepia esculenta *Hoyle*
五	ホタルイカ	5.	Watasenia scintillans (*Berry*)
六	ジンドウイカ	6.	Loligo japonica *Hoyle*

第六十六圖版 PL. LXVI

一	マダカ	1.	Haliotis gigantea *Gmelin*
二	メガヒ	2.	Haliotis gigantea sieboldii *Reeve*
三	クロガヒ	3.	Haliotis gigantea discus *Reeve*
四	ミヽガヒ	4.	Haliotis asinina *Linné*
五	トコブシ	5.	Haliotis japonica *Reeve*

第六十七圖版　PL. LXVII

圖		Fig.	
一—三	ヨメガカサ	1—3.	Cellana treuma (*Reeve*)
四—六	ホシノツメ	4—6.	Cellana nigrolineata (*Reeve*)
七—九	カサガヒ	7—9.	Cellana nigrisquamata (*Reeve*)
十、十一	クマノコガヒ	10,11.	Tegula xanthostigma (*A. Adams*)
十二—十四	ウノアシ	12—14.	Patelloida saccharina (*Linné*)
十五、十六	サラサバテイ	15,16.	Trochus niloticus *Linné*
十七、十八	ベニシリダカ	17,18.	Trochus conus hirasei *Pilsbry*

第六十八圖版　PL. LXVIII

一—三	シラタマツバキ	1—3.	Polinices sagamiensis *Pilsbry*
四—六	ツメタガヒ	4—6.	Polinices didyma (*Bolten*)
七—九	ダンベイキサゴ	7—9	Umbonium giganteum (*Lesson*)
十	ヤクワウガヒ	10.	Turbo marmoratus *Linné*
十一	リウテン	11.	Turbo petholatus *Linné*
十二	サヾエ	12.	Turbo cornutus *Solander*

第六十九圖版　PL. LXIX

一	マルタニシ	1.	Viviparus malleatus (*Reeve*)
二	ナガタニシ	2.	Viviparus longispira (*Smith*)
三—五	キヌガサガヒ	3—5.	Xenophora exuta (*Reeve*)
六—八	クマサカガヒ	6—8.	Xenophora pallidula (*Reeve*)
九、十	シドロ	9,10.	Strombus japonicus *Reeve*
十一、十二	マガキガヒ	11,12.	Strombus luhuanus *Linné*
十三—十五	ベニソデ	13—15.	Strombus aurisdianae guttatus *Kiener*
十六	カハニナ	16.	Semisulcospira libertina *Gould*

第七十圖版　PL. LXX

一	ヤマドリガヒ	1.	Tonna perdix (*Linné*)
二、三	タウカムリ	2,3.	Cassis cornuta (*Linné*)
四、五	マンバウガヒ	4,4.	Cypraecassis rufa (*Linné*)
六、七	スイジガヒ	6,7.	Lambis chiraga (*Linné*)

第七十一圖版　PL. LXXI

一—三	ハナビラダカラ	1—3.	Cypraea annulus *Linné*
四—六	ハナマルユキ	4—6.	Cppraea caput-serpentis *Linné*
七、八	チャノメダカ	7,8.	Cypraea argus *Linné*
九、十	ハチヾヤウダカラ	9,10.	Cypraea mauritiana *Linné*
十一、十二	ホシダカラ	11,12.	Cypraea tigris *Linné*
十三、十四	ムラクモダカラ	13,14.	Cypraea testudinaria *Linné*
十五、十六	ウミウサギ	15,16.	Amphiperas ovum (*Linné*)

第七十二圖版　PL. LXXII

一	カコボラ	1.	Cymatium parthenopeum (*Salis*)
二	ウラシマ	2.	Phalium pila (*Reeve*)
三	バウシユウボラ	3.	Charonia lampas (*Linne*)
四	ホラガヒ	4.	Charonia tritonis (*Linné*)
五	オホナルトボラ	5.	Tutufa bufo (*Bolten*)

第七十三圖版　PL. LXXIII

圖		Fig.	
一	イボニシ	1.	Thais clavigera (*Küster*)
二	ホソスヂテツボラ	2.	Thais persica (*Linné*)
三	テングガヒ	3.	Chicoreus ramosus (*Linné*)
四	アクキガヒ	4.	Murex troscheli *Lischke*
五	ホネガヒ	5.	Murex triremis (*Perry*)
六	アカニシ	6.	Rapana thomasiana *Crosse*

第七十四圖版　PL. LXXIV

一、二	シヨツコウラ	1,2.	Harpa conoidalis *Lamarck*
三	コロモガヒ	3.	Cancellaria spengleriana *Deshayes*
四、五	ジュドウマクラ	4,5.	Oliva erythrostoma (*Meuschen*)
六	オニニシ	6.	Hemifusus tuba (*Gmelin*)
七	ナガニシ	7.	Fusinus perplexus nagasaki (*Graban*)
八	イトマキヒタチオビ	8.	Fulgoraria rupestris (*Gmelin*)
九	ヒタチオビ	9.	Fulgoraria (Psephaea) prevostiana *Crosse*

第七十五圖版　PL. LXXV

一	クロミナシ	1.	Conus marmoreus *Linné*
二	ムシロイモモドキ	2.	Conus rattus taitensis *Hwass*
三	マダライモ	3.	Conus ebraeus *Linné*
四	ハルシヤガヒ	4.	Conus tessullatus *Born*
五	タガヤサンミナシ	5.	Conus textile *Linné*
六	クロフモドキ	6.	Conus litteratus pardus (*Bolten*)
七	コモンイモ	7.	Conus arenatus *Hwass*
八	ベッカフイモガヒ	8.	Conus fulmen *Reeve*
九	カバミナシ	6.	Conus vexillum *Gmelin*

第七十六圖版　PL. LXXVI

一	クダマキガヒ	1.	Turris leucotropis (*Adams & Reeve*)
二	ホシカリガネ	2.	Turris unedo (*Kiener*)
三	ウシノツノガヒ	3.	Terebra muscaria *Lamarck*
四	キリガヒ	4.	Terebra triseriata *Gray*
五	ヤスリギリ	5.	Terebra torquata *Adams & Reeve*
六	リウキウタケ	6.	Terebra maculata (*Linne*)
七	ベニタケ	7.	Terebra dimidiata (*Linne*)
八	キバタケ	8.	Terebra crenulata (*Linne*)
九	タケノコガヒ	9.	Terebra subulata (*Linne*)

第七十七圖版　PL. LXXVII

一—三	キクノハナガヒ	1—3.	Siphonaria sirius *Pilsbry*
四—六	カラマツガヒ	4—6.	Siphonaria japonica (*Donovan*)
七、八	ミスガヒ	7,8.	Hydatina physis (*Linné*)
九、十	ヤカタガヒ	9,10.	Hydatina albocincta (*Hoeven*)
十一	マルツノガヒ	11.	Dentalium vernedei *Sowerby*
十二	ヒラツノガヒ	12.	Dentalium hungerfordi *Pilsbry & Sharp*
十三	ツノガヒ	13.	Dentalium weinkauffi *Dunker*
十四	オキナエビス	14.	Pleurotomaria beyrichi *Hilgendorf*
十五、十六	ナツメガヒ	15,16.	Bullaria vernicosa (*Gould*)
十七、十八	ミサキグルマ	17,18.	Architectonica maxima (*Philippi*)

第七十八圖版　PL. LXXVIII

圖		Fig.	
一、二	エガヒ	1,2.	Barbatia decussata (*Sowerby*)
三—六	アラナミマガシハ	3—6.	Anomia cytaeum *Gray*
七—九	ワシノハ	7—9.	Navicula navicularis linter (*Jonas*)
十	アカガヒ	10.	Arca inflata *Reeve*
十一、十二	サルボウ	11,12.	Arca subcrenata *Lischke*
十三、十四	ハイガヒ	13,14.	Arca granosa *Linné*

第七十九圖版　PL. LXXIX

一、二	ツバメガヒ	1,2.	Pteria cypsellus (*Dunker*)
三、四	ウグヒスガヒ	3,4.	Pteria brevialata (*Dunker*)
五—七	イシマテ	5—7.	Lithophaga curta (*Lischke*)
八、九	タマキガヒ	8,9.	Glycymeris vestita (*Dunker*)
十—十二	ヒバリガヒ	10—12.	Volsella barbata (*Linné*)
十三—十五	ケガヒ	13—15.	Trichomya hirsuta (*Lamarck*)
十六—二十一	イガヒ	16—21.	Mytilus crassitesta *Lischke*
二十二—二十四	クジャクガヒ	22—24.	Septifer bilocularis (*Linné*)

第八十圖版　PL. LXXX

一	シユモクガヒ	1.	Malleus albus *Lamarck*
二	クロテフガヒ	2.	Pinctada margaritifera (*Linné*)
三	シンジユガヒ	3.	Pinctada martensii (*Dunker*)
四	ハバウキガヒ	4.	Pinna attenuata *Reeve*
五	マベ	5.	Pteria macropteria (*Lamarck*)
六	タヒラギ	6.	Atrina japonica (*Reeve*)

第八十一圖版　PL. LXXXI

一	イタボガキ	1.	Ostrea denselamellosa *Lischke*
二、三	マガキ	2,3.	Ostrea gigas *Thunberg*
四、五	ケガキ	4,5.	Ostrea echinata *Quoy et Gaimard*
六	トサカガキ	6.	Ostrea cristagalli (*Linné*)
七	スミノエガキ	7.	Ostrea rivularis *Gould*
八	イハガキ	8.	Ostrea circumpicta *Pilsbry*

第八十二圖版　PL. LXXXII

一	イタヤガヒ	1.	Pecten laqueatus *Sowerby*
二	ホタテガヒ	2.	Pecten yessoensis *Jay*
三、四	キンチヤクガヒ	3,4.	Chlamys plica (*Linné*)
五、六	アズマニシキ	5,6.	Chlamys farreri nipponensis *Kuroda*
七	ヒアフギ	7.	Chlamys senatoria nobilis (*Reeve*)
八	ツキヒガヒ	8.	Amusium japonicum (*Gmelin*)

第八十三圖版　PL. LXXXIII

一、二	ヤマトシジミ	1,2.	Corbicula japonica *Prime*
三、四	セタシジミ	3,4.	Corbicula sandai *Reinhardt*
五、六	マシジミ	5,6.	Corbicula leana *Prime*
七、八	ナリヒラシジミ	7,8.	Corbicula leana orthodonta *Pilsbry*
九、十	ニホンシジミ	9,10.	Corbicula nipponensis *Pilsbry*
十一	シヤウジヤウガヒ	11.	Spondylus regius *Linné*
十二、十三	チリボタン	12,13.	Spondylus cruentus *Lischke*

第八十四圖版　PL. LXXXIV

圖		Fig.	
一、二	イシガヒ	1,2.	Unio douglasiae nipponensis *v. Martens*
三、四	サヽノハ	3,4.	Lanceolaria oxyrhyncha (*v. Martens*)
五	タガヒ	5.	Anodonta japonica *Clessin*
六	ドブガヒ	6.	Anodonta lauta *v. Martens*
七	イケテフガヒ	7.	Hyriopsis schlegeli (*v. Martens*)
八	カラスガヒ	8.	Cristaria plicata spatiosa (*Clessin*)

第八十五圖版　PL. LXXXV

一	サラガヒ	1.	Tellina lutea venulosa *Schrenck*
二、三	ベニガヒ	2,3.	Tellina consanguinea *Sowerby*
四、五	サクラガヒ	4,5.	Tellina nitidula *Dunker*
六、七	バカガヒ	6,7.	Mactra sulcataria *Reeve*
八	オホトリガヒ	8.	Lutraria maxima *Jonas*
九、十	シホフキ	9,10.	Mactra veneriformis *Reeve*
十一	ウバガヒ	11.	Mactra sachalinenensis *Schrenck*
十二	アリソガヒ	12.	Mactra spectabilis *Lischke*
十三	ミルクヒ	13.	Schizothaerus nuttalli (*Conrad*)

第八十六圖版　PL. LXXXVI

一	アサリ	1.	Paphia philippinarum (*Adams & Reeve*)
二	サツマアカガヒ	2	Paphia amabilis (*Philippi*)
三	スダレガヒ	3.	Paphia euglypta (*Philippi*)
四、五	ハマグリ	4,5.	Meretrix meretrix (*Linné*)
六	カヾミガヒ	6.	Dosinia japonica (*Reeve*)
七	コタマガヒ	7.	Gomphina melanaegis *Roemer*
八	オキシジミ	8.	Cyclina sinensis (*Gmelin*)
九	ワスレガヒ	9.	Sunettina menstraulis (*Menke*)
十	イソシジミ	10.	Sanguinolaria olivacea (*Jay*)
十一	マツヤマワスレ	11.	Macrocallista pacifica (*Dillwyn*)

第八十七圖版　PL. LXXXVII

一	サツマアサリ	1.	Venus lamellaris (*Schumacher*)
二	ヌノメガヒ	2.	Venus puerpera *Linné*
三	アラヌノメガヒ	3.	Venus reticulata *Linné*
四	トリガヒ	4.	Cardium muticum *Reeve*
五	ザルガヒ	5.	Cardium burchardi *Dunker*
六	ナガザルガヒ	6.	Cardium elongatum Bruguière
七	ウチムラサキ	7.	Saxidomus purpuratus (*Sowerby*)

第八十八圖版　PL. LXXXVIII

一	ヒレジヤコ	1.	Tridacna squamosa *Lamarck*
二	シラナミ	2.	Tridacna elongata *Lamarck*
三	シヤコ	3.	Tridacna gigas (*Linné*)
四	シヤゴウ	4.	Hipoppus hipoppus *Linné*

第八十九圖版　PL. LXXXIX

圖		Fig.	
一、二	マテガヒ	1,2.	Solen gouldi *Conrad*
三	オホマテ	3.	Solen grandis *Dunker*
四	エゾマテガヒ	4.	Solen krusensterni *Schrenck*
五	アカマテガヒ	5.	Solen gordonis *Yokoyama*
六	ヒラカモジガヒ	6.	Lutraria sieboldtii *Reeve*
七	オニアサリ	7.	Protothaca jedoensis (*Lischke*)
八	オホノガヒ	8.	Mya arenaria japonica *Jay*
九	ビノスカヒ	9.	Mercenaria stimpsoni (*Gould*)
十	ツヽガキ	10.	Pericillus giganteus (*Sowerby*)

第九十圖版　PL. XC

一、二	キヌタアゲマキ	1,2.	Psammosolen divaricatus (*Lischke*)
三、四	ソトホリガヒ	3,4.	Laternula kamakurana (*Pilsbry*)
五、六	ニホガヒモドキ	5,6.	Zirfaea crispata (*Linné*)
七—九	ウミタケ	7—9.	Barnea latissima (*Sowerby*)
十	ニツタリツガヒ	10.	Tellina virgata jubar *Hanley*
十一	ウラキツキガヒ	11.	Codakia interrupta (*Lamarck*)
十二	イヨスダレ	12.	Paphia undulata (*Born*)
十三	アゲマキ	13.	Sinovaclula constrica (*Lamarck*)
十四	ムラサキガヒ	14.	Soletellina adamsii *Reeve*

第九十一圖版　PL. XCI

一	ババカゼ	1.	Placiphorella sp.
二	ニシキヒザラガヒ	2.	Onithochiton hirasei *Pilsbry*
三	ヒザラガヒ	3.	Liolophura japonica *Lischke*
四	ヤスリヒザラガヒ	4.	Ischinochiton coreanicus *Adams & Reeve*
五	ケハダヒザラガヒ	5.	Acanthochitona dephilippi *Tapparone-Canebri*
六	ケムシヒザラガヒ	6.	Cryptoplax japonica *Pilsbry*
七、八	オホエラウミウシ	7,8.	Argus speciosa (*Abraham*)
九	タテジマウミウシ	9.	Pleurophyllidia japonica *Elliot*
十	フレリトゲアメフラシ	10.	Aclesia freeri *Griffin*
十一	タツナミガヒ	11.	Dolabella sp.

第九十二圖版　PL. XCII

一	コマホウズキガヒ	1.	Terebratella coreanica *Adams & Reeve*
二	ホウズキガヒ	1.	Laqueus rubellus *Sowerby*
三	タテスジホウズキガヒ	3.	Waldeheimia grayi *Adams*
四	シヤミセンガヒ	4.	Lingula anatina *Lamarck*
五	イトメ	5.	Ceratocephale osawai *Izuka*
六	ゴカイ	6.	Nereis japonica *Izuka*
七	イムシ	7.	Echiurus unicinctus *von Drasche*
八	ケヤリ	8.	Laonome japonica *Marenz*

第九十三圖版　PL. XCIII

一、二	イソバナ	1,2.	Melitodes flabellifera *Kückenthal*
三	ミドリイソギンチヤク	3.	Cribrina artemisia *McMurrich*
四	ヨロイイソギンチヤク	4.	Anthopleura xanthogrammica *Berkely*
五	シロサンゴ	5.	Corallium konojoi *Kishinouye*
六	モヽイロサンゴ	6.	Corallium elatior *Ridley*
七	アカサンゴ	7.	Corallium japonicum *Kishinouye*

第九十四圖版　PL. XCIV.

圖		Fig.	
一	ビゼンクラゲ	1.	Phopilema esculenta *Kishinouye*
二	カツヲノエボシ	2.	Physalia utriculus *Eschsch*
三	アンドンクラゲ	3.	Charybdea rastonii *Haacke*
四	アカクラゲ	4.	Dactylometra pacifica *Goette*
五	ミズクラゲ	5.	Aurelia aurita *Lamarck*
六	タコクラゲ	6.	Mastigias papua *L. Agassiz*

第九十五圖版　PL. XCV

一	ホツスガヒ	1.	Hyalonema sieboldi *Gray*
二	グミカイメン	2.	Tethya japonica (*Lampe*)
三	クロイソカイメン	3.	Reniera okadai *Kadota*
四	ヤマトカイロウドウケツ	4.	Euplectella imperialis *Ijima*
五	オウエンカイロウドウケツ	5.	Euplectella oweni *Herklots & Marshall*
六	ツボシメジカイメン	6.	Grantessa shimeji *Hozawa*
七	モクヨクカイメン	7.	Euspongia iregularis *Lendenfeld*

第九十六圖版　PL. XCVI

一	エビアマモ	1.	Phyllospadix japonica *Makino*
二	アマモ	2.	Zostera marina *Linné*
三	アヲノリ	3.	Enteromorpha sp.
四	アナアヲサ	4.	Ulva pertusa *Kjellm.*
五	ミル	5.	Codium fragile (*Sur.*) *Hariot*
六	ナガミル	6.	Codium cylindricum *Holm.*
七	ワカメ	7.	Undaria pinnatifida *Sur.*
八	ヒロメ	8.	Undaria undarioides (*Yendo*) *Okam.*

第九十七圖版　PL. XCVII

一	ハバノリ	1.	Endarachne Binghamiae *J. Ag.*
二	ヒジキ	2.	Turbinaria fusiformis (*Harv.*) *Yendo*
三	モヅク	3.	Cladosiphon decipiens (*Sur.*) *Okam.*
四	マツモ	4.	Heterochordaria abietina (*Rupr.*) *S. and G.*
五	ホンダワラ	5.	Sargassum enerve *C. Ag.*
六	イギス	6.	Ceramium Boydenii *Gepp.*
七	キリンサイ	7.	Eucheuma muricatum (*Gmel.*) *Web. v. Bos.*
八	アキミドリ	8.	Brachytrichia Quoyi (*C. Ag.*) *Born. et. Flah.*
九	スイゼンジノリ	9.	Phylloderma sacrum *Sur.*

第九十八圖版　PL. XCVIII

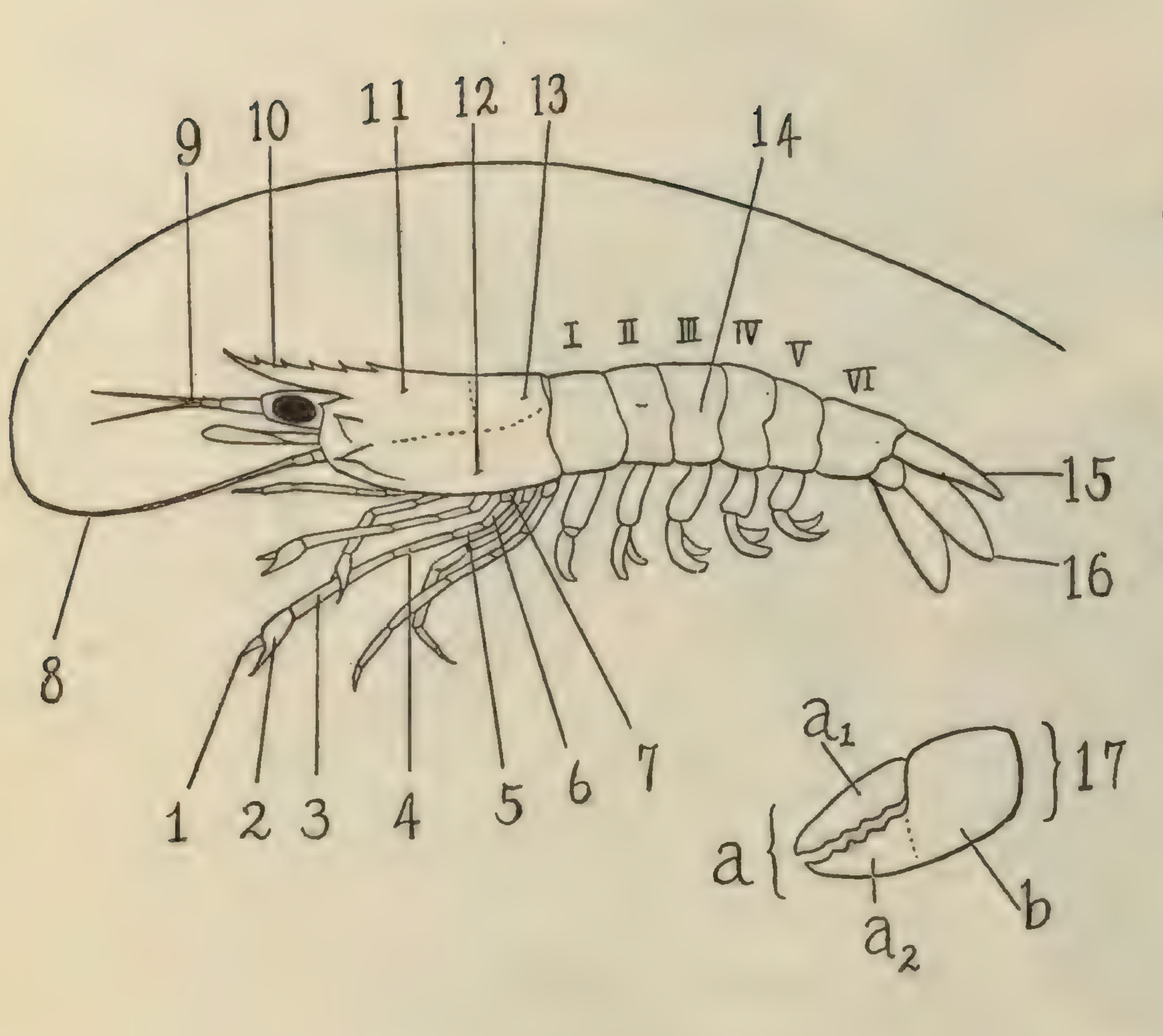
一	ツルモ	1.	Chorda Filum (*L.*) *Lam.*
二	ツルアラメ	2.	Ecklonia stolonifera *Okam.*
三、四	アラメ	3,4.	Eisenia bicyclis (*Kjellm.*) *Setch.*
五	クロメ	5.	Ecklonia krome *Okam.*
六	カヂメ	6.	Ecklonia cava *Kjellm.*
七	ネコアシコンブ	7.	Arthrothamnus bifidus (*Gmel.*) *Rupr.*
八	トロロコンブ	8.	Kjellmanniella gyrata (*Kjellm.*) *Miyabe*
九	コンブ	9.	Laminaria japonica *Aresch.*
十	ミツイシコンブ	10.	Laminaria angustata *Kjellm.*

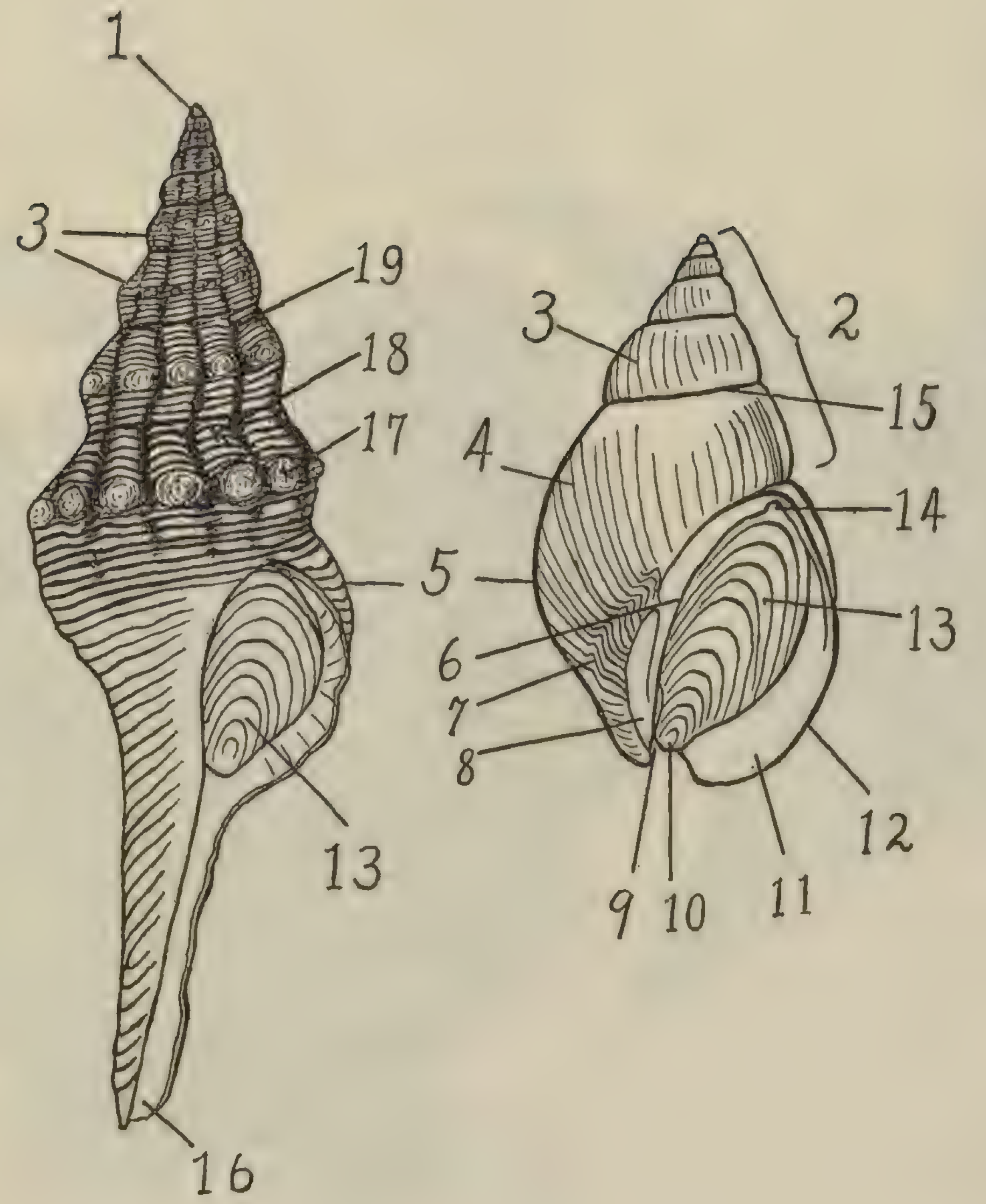
第九十九圖版 PL. XCIX

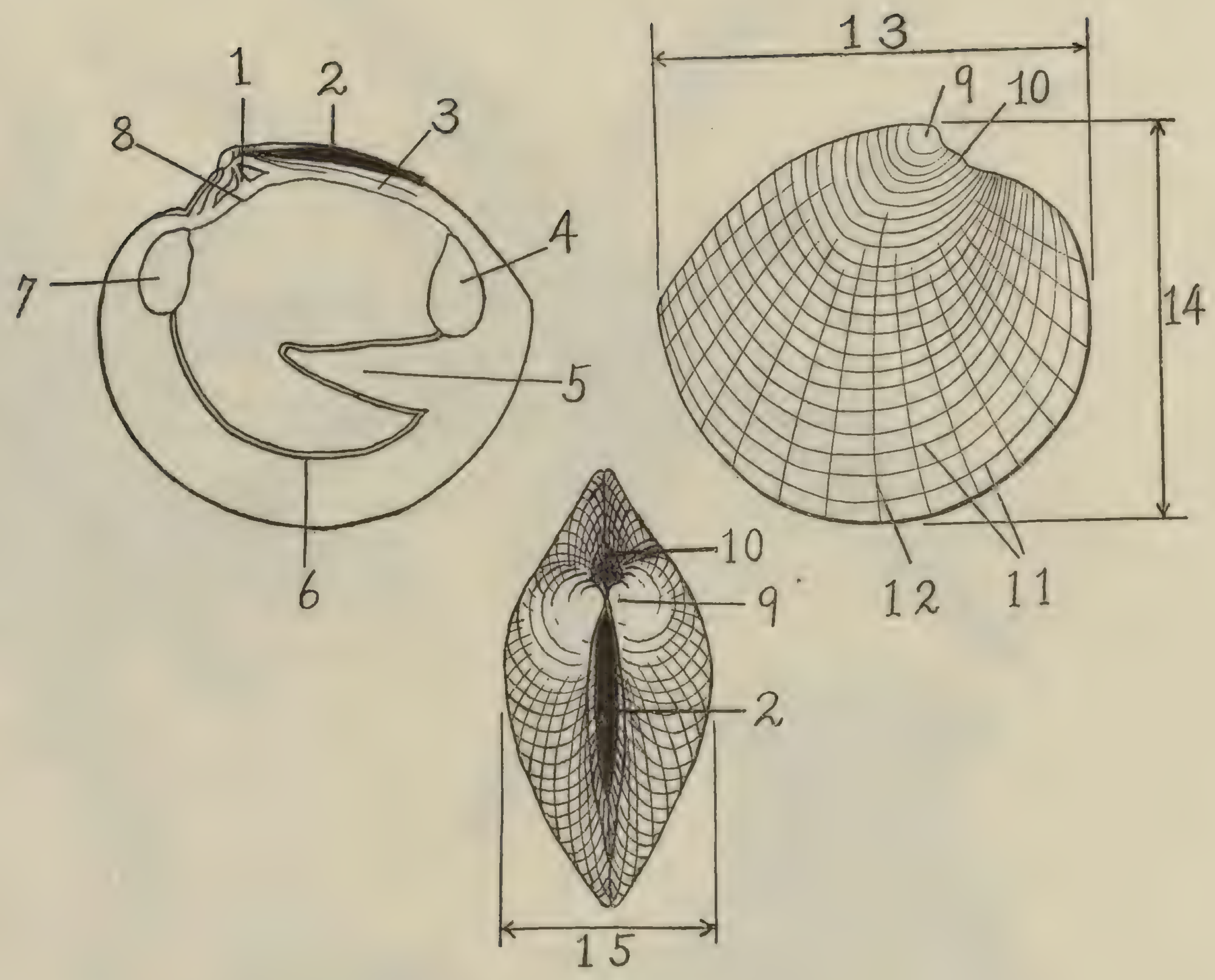
圖		Fig.	
一	オホブサ	1.	Gelidium pacificum *Okam.*
二	オニクサ	2.	Gelidium japonicum (*Harv.*) *Okam.*
三	テングサ	3.	Gelidium Amansii *Lamour.*
四	ユヒキリ	4.	Acanthopeltis japonica *Okam.*
五	オキツノリ	5.	Gymnogongrus flabelliformis *Harv.*
六	サイミ	6.	Ahnfeltia concinna *J. Ag.*
七	ギンアンサウ	7.	Iridaea laminarioides var. Cornucopiae *J. Ag.*
八	スギノリ	8.	Gigartina tenella *Harv.*
九	コメノリ	9.	Grateloupia gelatinosa *Holm.*
十、十一	オゴノリ	10,11.	Gracilaria confervoides (*L.*) *Grev.*
十二	シラモ	12.	Gracilaria compressa (*Ag.*) *Grev.*
十三	カバノリ	13.	Gracilaria Textorii *Sur.*

第百圖版 PL. C

一	マフノリ	1.	Gloiopeltis tenax (*Turn.*) *J. Ag.*
二	フクロフノリ	2.	Gloiopeltis furcata *Post. et Rupr.*
三	ウミゾウメン	3.	Nemalion vermiculare *Sur.*
四	コトヂツノマタ	4.	Chondrus elatus *Holm.*
五、六	ツノマタ	5,6.	Chondrus ocellatus *Holm.*
七	アサクサノリ	7.	Porphyra tenera *Kjellm.*
八	カタノリ	8.	Grateloupia divaricata *Okam.*
九	ムカデノリ	9.	Gratoloupia filicina (*Wulf.*) *C. Ag.*
十	キヨウノヒモ	10.	Grateloupia laucifolia (*Harv.*) *Okam.*
十一、十二	エゴノリ	11,12.	Ceramium Hypnaeoides (*J. Ag.*) *Okam.*
十三	ハナフノリ	13.	Gloiopeltis cervicornis (*Sur.*) *Schem.*
十四	カイニンサウ	14.	Digenea simplex (*Wulf.*) *C. Ag.*
十五	トサカノリ	15.	Meristotheca papulosa *J. Ag.*







蝦蟹類術語圖解

1.	趾節	dactylus	12.	鰓域	branchial region
2.	前節	propodus	13.	心域	cardiac region
3.	腕節	wrist	14.	腹節側甲	abdominal tergum
4.	長節	merus	15.	尾脚	uropod
5.	座節	ischium	16.	尾節	telson
6.	基節	basis	17.	手部	hand
7.	底節	coxus	a.	趾部	fingers
8.	第二觸角	antenna	a_1	可動趾	movable finger
9.	第一觸角	antennule	a_2	不動趾	immovable finger
10.	額角	rostrum	b.	掌部	palm
11.	胃域	stomachal region			

卷貝類の術語圖解

1.	螺頂	apex	11.	殼口	aperture
2.	螺塔	spire	12.	外唇	outer lip
3.	螺層	whorl	13.	厴	opercle
4.	成長線	line of growth	14.	後溝	posterior canal
5.	體層	body whorl	15.	縫合	suture
6.	內唇	inner lip	16.	水管溝	canal of siphon
7.	緇帶	fold	17.	結節	nodule or tubercle
8.	臍孔	umbilicus	18.	螺脈	spirally striae
9.	前溝	anterior canal	19.	縱肋	longitudinal rib
10.	厴ノ核	nucleus of opercle			

二枚貝類術語圖解

1.	主歯	cardinal teeth	8.	蝶番	hinge
2.	靱帶	ligament	9.	殼頂	umbo
3.	側歯	lateral teeth	10.	前丘	lunule
4.	後肉柱痕	posterior adductor impression	11.	輪脈	concentric striae
5.	彎入	pallial sinus	12.	放射脈	ridge
6.	套痕	pallial line	13.	殼長	length
7.	前肉柱痕	anterior adductor impression	14.	殼高	height
			15.	殼幅	depth

モミジガヒ
Astropecten scoparius *Valenciennes*
（第五十一圖版　第一圖）　×1

5 輻，輻の長さ 80 粍に達す．輻徑と間輻徑との比は 4.5 對 4 なり．反口側の色彩は青褐色口側は白色なり．形狀正星形にして間輻の切目は殆ど直角なり．反口側の小柱體は比較的大なれども中心部に於ては小さく腕の基部に於ては最大なり．上緣板は 30 個よりなり腕の基部なる數個を除き各個に 1 本の棘を着く．下緣板は多くの棘によりて覆はれ，其外緣のもの最も長し．北海道より九州に至る 200 米線附近の泥底に棲息す．

クロスジモミジガヒ
Astropecten kagoshimensis *de Loriol*
（第五十一圖版　第二圖）　×1

5 輻，輻長は 60 粍に及ぶ．反口側の小柱體は細かく，特に中心部に於いて最小なり．又こゝには屢〻圓錐狀の突起あり．上緣板は 30 個にして各れも上方に突出する 1 個の短き棘を具ふ．腕の末部に於いては無し．側步帶板は步帶溝に向ひて三個の棘を突出す．口板は顯著なる數對の棘を有す．端板は比較的大にして反口側に對して深く二枝に分る．本種は三崎より鹿兒島に至る 40 米より 100 米の海底に生活す．

アカヒトデ
Certonardoa semiregularis (*Müller et Troschel*)
（第五十一圖版　第三圖）　×1

5 輻，輻徑 90 粍に達することあり．體色一樣に美麗なる朱橙色なり．輻徑と間輻徑との比は 5 乃至 7 なり腕は 5 本，丸く膨らみ斷面は殆ど圓形をなす．反口側の板は盤部に於いて不規則の配列をなせども腕の部にありては極めて規則正しく，縱と橫との列を示し．各板は稍隆起すれども半球狀に突出するに至らず．側步帶板は溝に對して 5 或は 6 個の棘を生ず．皮鰓は反口側に限られ群を成して分布す．本州，四國，九州の淺海に多く延繩の餌を捕食することあるを以て漁業上に害あり．

マボヤ
Cynthia roretzi *v. Drasche*
（第五十一圖版　第四圖）　×1

體は洋梨形なり．出入兩孔は體の上部に位し，上部のものは口にして下部は排泄孔なり．外皮は革樣にして乳頭狀の突起を生ず．筋肉層は厚く無紋筋纖維よりなる．觸手は分岐す．鰓囊には左右に約拾個の褶ありて纖毛を生じ食餌は水の流れと共に食道に送らる．食道は胃腸に連り腸の末端は排泄口に開く．發生はアッペンディクラリア期を經過す．筋肉は食料となる．

常に海底の固定物に附着生活をなし，本州の北東海岸及び北海道の沿岸に分布す．

カラスボヤ
Cynthia karasboja *Oka*
（第五十一圖版　第五圖）　×1

體は卵形，長さ 45 粍幅 35 粍に達す．口及排泄口ともに圓錐狀に突出す．表面は鳶色にして皺多くヴライオゾア等の附着せるを見ることあり．外皮並に筋肉層共に厚く其筋肉層の色は淡紅橙色を呈し水管部は濃紅色なり．觸角は樹枝狀に分岐し．鰓囊には左右兩側に 6 個づゝの褶あり．生殖腺は體の兩内側に數個づゝ存在す．

本州より北海道に亘る淺海の岩底に附着生活をなす．

ナマコ
Stichopus japonicus *Selenka*
（第五十一圖版　第六圖）　×1

體色背面は暗綠色，或は暗褐色時には複雜なる斑紋をなす．腹面は赤褐色なり．體長 400 粍に達す．口の周圍には 20 個の觸手環生し伸縮自在なり．體の表面には前後に縱走する 5 條の步帶中 2 條は背面に屬し，他の 3 條は腹面に屬す．表皮下結組織中には顯微鏡的骨片存在し，樽狀をなせども老若に依りて甚しく其形狀を異にす．雌雄同體なり．發生中必ずアウリキユラリヤ期を經過す．腸管中にカクレ魚の共棲することあり．千島，樺太より九州及朝鮮に分布し常に淺海に棲息す．冬期美味にして生食する外乾製して"イリコ"となす．腸管，生殖腺等の鹽藏せしものは"コノワタ"として高級食料品の一なり．

フジナマコ
Holothuria monacaria (*Lesson*)
（第五十一圖版　第七圖）　×1

體は半圓筒狀に延長し，500 粍を越ゆることあり．脊面は褐色，腹面は黃白色なり．疣足の基部は暗褐色なり．口の周圍には 20 個の觸手あり．管足は腹面に幅廣き三縱帶を形成す．背面には六列の疣足あり．各疣足の基部は圓錐狀に擴がれり．骨片は稍々四角形なる基底部と 4 個の柱よりなる．外に釦狀板あり．楕圓形にして三對乃至四對の孔を有す．雌雄同體にして我國中部以南の淺海に棲息す．

キンコ
Cucumaria japonica *Semper*
（第五十一圖版　第八圖）　×1

體は長楕圓形，腹面は強く彎曲し，背面稍扁平なり．體長は 150 粍乃至 200 粍に達す．體色通常灰褐色なれども暗褐色，濃紫色時には黃白色を呈す．體壁は肉質にして滑かなり．口は殆ど前端に位し，10 個の觸手にて圍まる．石灰環は化骨頗る不完全にして結組織内に埋沒す．1 個のポーリ氏囊は長大にして往々體長に等しきことあり．管足は各步帶に二列をなし背側に稍々少し．骨片は鋸齒狀緣を有する穿孔板にして疣狀の突起を有し雌雄同體なり．寒流區域に棲息する種類にして我國にては牡鹿半島以北．北海道，千島，樺太の沿岸に棲息す．

Astropecten scoparius *Valenciennes*
"Momizigai"
Pl. LI, fig. 1.　×1

Number of radii 5, length of radius reaches 80 mm.; its diameter in comparison with that of inter-radius is 3.5 to 4. Colour of aboral side bluish grey, that of oral white.

Shape of body regularly stellated, notch of inter-radius almost rectangular. Comparatively large paxillæ grow on aboral side, the small ones being situated on the central portion, the largest one on the basal portion of arm. Super-marginal plate composed of 30 pieces, each of them having a short spine except the ones at the basal end of arm. Infra-marginal plate covered with many spines, the outer one being the longest.

This species inhabits the sandy mud bottom at 200 meters depth off the coasts from Hokkaido to Kyusyu.

Astropecten kagoshimensis *de Loriol*
"Kurosuzi-momizigai"
Pl. LI, fig. 2.　×1

Number of Radii 5. Length of Radius is 50 mm. Paxillæ on aboral side small, especially the smallest ones at the centre portion on the conical process at the same portion. Number of super-marginal plates 30, each of them provided with one short spine projecting upwards, none at terminal end of arm. Adambulacral plates have 3 spines projecting against the ambulacral groove. Oral plate has a few pairs of remarkable spines. Terminal plate comparatively large and divided deeply into 2 branches against the aboral side.

The species lives at a depth of 40-100 metres from Misaki to Kagosima.

Certonardoa semiregularis (*Müller et Troschel*)
"Akahitode"
Pl. LI, fig. 3.　×1

Number of radii 5, its diameter reaches 90 mm. Colour orange red. Diameter of radius to that of inter-radius is as 5 to 7. Number of arms 5. Each of arms distends circularly, and its section is circular in shape. Aboral plates are arranged irregularly on the disc but regularly on the arms lengthwise or crosswise. Each plate protuberates more or less, but does not become a semi-spherical process. Ventro-lateral plate protrudes with 5-6 spines against groove. Papillæ scattered in large numbers but only on aboral side.

The species inhabits the shallow waters of Sikoku, Kyusyu and Honsyu in Japan. They inflict damage on long-line fisheries by devouring the bait.

Cynthia roretzi *v. Drasche*
"Maboya"
Pl. LI, fig. 4.　×1

Body pear-like in shape, 2 apertures for out- or in-let situated on upper side of it. Upper one is a mouth and lower is an excretory pore. Epidermis composed of leather-like materials from which the processes of papillæ project. Muscular layer thick, and composed of non-striated muscular fibre. Tentacles branched. Gill-sack has about 10 folds on both sides and is ciliated; by it the food materials pour into the oesophagus with the current of the water. Oesophagus connected with stomach and intestines. The end of intestine opens into excretory pore. Development passes through appendicularia stage, the flesh is eatable. These animals live attached to solid matter on sea-bottom and are distributed on north eastern coast of Honsyu and on coast of Hokkaido.

Cynthia karasboja *Oka*
"Karasuboya"
Pl. LI, fig. 5.　×1

Body oval, reaches 45 mm. in length and 35 mm. in width. Mouth and excretory aperture project conically. Skin much folded, and its colour brown; tunica and muscle-layer thick; colour of muscle-layer light reddish rouge, part of water-tube dark red. Tentacle branch-shaped; gill-sack has 6 folds on its right and left sides; some genital organs situated on both inner sides of body. Animals live attached to rocky bottom in shallow waters from Hokkaido to Honsyu.

Stichopus japonicus *Selenka*
"Namako"
Pl. LI, fig. 6.　×1

Colour dark green or dark brown dorsally, often intricately mottled; reddish brown ventrally. Body-length attains to 400 mm.; twenty large tentacles grow on the margin of the mouth and are both contractile and retractile.

5 transverse ambulacral zones run along the surface of the body before and behind, 2 of them (*Bivium*) being situated on the dorsal and 3 (*Trivium*) on the ventral portions. There are microscopical stool-like spicules imbedded in the connective tissue under the epidermis, the shape varying widely in the young and in the old. The animal is hermaphrodite. The auricularia stage is invariably passed in the course of development. Feirasfer often lives in the intestines of the animal. This species inhabits shallow water and is distributed widely from Tisima, Kabafuto and Korea. The flesh is delicious in winter, eaten raw or made into "Iriko" by a drying-process; the salted intestine and genital organ also are a food of high grade.

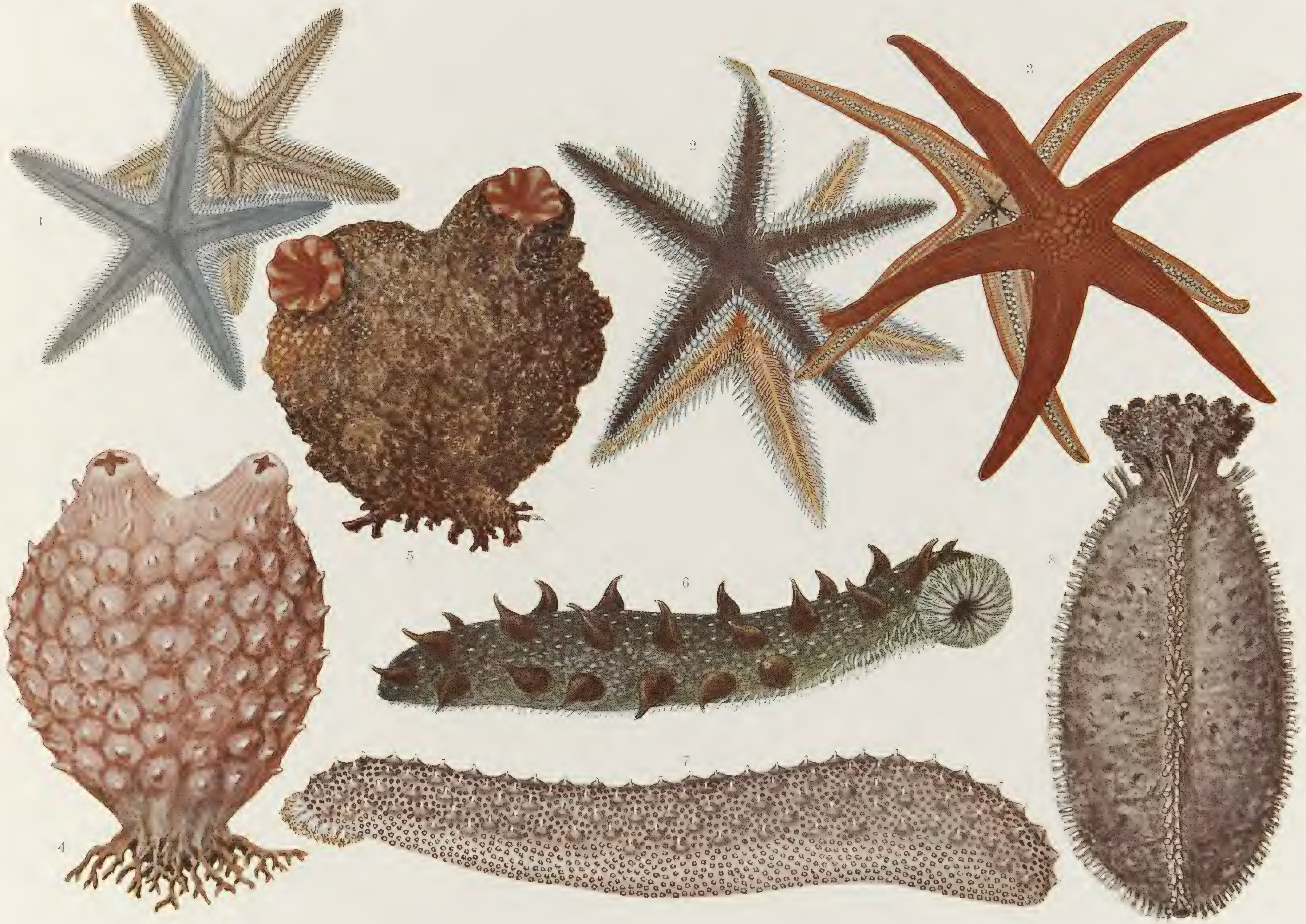
Holothuria monacaria (*Lesson*)
"Fudi-namako"
Pl. LI, fig. 7.　×1

Body elongated and cylindrical in shape, often over 500 mm. in length. Colour brownish dorsally, but yellowish white ventrally base of papillae being dark brown. 20 buccal tentacles surround the margin of the mouth. The tube-feet run in 3 longitudinal zones on the ventral side, 6 rows of papillæ being arranged on the dorsal side and the base of each foot extending conically. One spicule is composed of a square basal plate having 4 axes, and the others of buttons, in which 3 or 4 pairs of pores are perforated. Hermaphrodite. This species is restricted to the shallow water north of central Japan.

Cucumaria japonica *Semper*
"Kinko"
Pl. LI, fig. 8.　×1

Body elongated and spherical in shape, extremely curved ventrally, flattened a little dorsally. Body-length 150-200 mm. Colour greyish brown normally, but often dark brown or purplish, rarely yellowish white. Body wall muscular and smooth. Mouth situated almost at the frontal end of the body and surrounded by 10 buccal tentacles. Calcareous ring ossified incompletely and imbedded in the connective tissue. Polian vesicle large, often equal to the size of the body. Tube-feet arranged in two rows along ambulacral zone; and there are a few on the dorsal. Spicules perforated, their margins being serrated and provided with wart-like processes. Hermaphrodite.

Species lives in a cold current region and is distributed in northern parts of Japan from the Odika peninsula near Sendai to Kabafuto.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ヤツデヒトデ

Asterias Calamaria *Gray.*

（第五十二圖版　第一圖）　×1.

7乃至9輻にして直徑60粍，其半數の輻は極めて短小なるこごあり．穿孔體は2-3個にして腕は稍多角形を呈す．反口側正中線に沿ひて棘の一縱列あり．更にその兩側に各ゝ一條の不規則なる棘列あり．生時脊面は焦茶色を呈し，之に青，白，赤等の斑點を混ふ．産卵期は六月下旬より始まりビピンナリア期を過ぎて成長す．本邦中部以南九州に亘り分布し，常に岩礁上に生活す．

キヒトデ

Asterias versicolor *Sladen.*

（第五十二圖版　第二圖）　×1.

5輻，輻徑100粍，間輻徑20粍．腕の基部は稍ゝ狹く先端に向ひて徐々に細く尖れり．反口側は高く膨らみ口側は平なり．反口側も骨板は稍ゝ粗き網目を造り，棘は疎に生じ，腕の正中線上には多少明かなる縱列を形成すれごも其の兩側には不規則に疎隔せる棘列あり．此等の棘は多くの叉棘もて圍まる．腕の側緣に沿ひては規則正しき一列の棘あり，これ上緣板を示せるものにして棘は通常縱に割れ且つ口側に向へる半分は叉棘により圍まる．口側に於ては腕の各側に複列をなせる棘あり．側歩帶板は一つおきに歩帶溝に向つて1個及び2個の棘を生ず．管足は4列，穿孔體は圓形にして稍ゝ盤の周邊に近く位す．反口側緣の色は黃色，中心部は黃褐色なり．本州中部より九州に亘り16乃至100米の淺海に棲息す．

ハダカヒトデ

Pseudarchaster pretiosus (*Doderlein*).

（第五十二圖版　第三圖）　×1.

5輻，殼は固く，特に口側に於て然り．腹側板は互に固着す．盤は大きく間腕部の角度は直角より僅か大なり．上緣板は比較的大且低く小なる多角粒に依つて包まる．下緣板は上緣板の如く低くけれごも廣く且極めて僅かに突出す．側歩帶板は寧ろ狹く下緣板7個宛に側歩帶板9個を有す．口板は比較的狹く長し．腹側板は菱形にして互に固く密着す．小柱體は密に集り盤の中央部のもの最も小さし．穿孔體は甚扁平にして小柱體の基部にては僅か隆起す．

盤は比較的大なり，之を反口側面より見る時は其外觀橢圓なり．反口側の色彩は暗赤色．口側は暗橙赤色なり．

此種は20米より48米に至る淺海に生活し．東京灣．相模灣．浦賀水道．三崎等にて採集せらる．

ムラサキモミジガヒ

Asteropecten ludwigi *De Loriol.*

（第五十二圖版　第四圖）　×1.

5輻，大なるものは160粍に達す．體は正しき星狀をなす．間歩帶の切目は直角を有す．反口側の小柱體は甚大なり．17或は18個の外觀花冠狀小棘あり．盤の中心にある小柱體の區域は狹く且目に付き難し．穿孔體は比較的小さく．殆ご球形をなす．端板は大きく二葉なり．口側の色は暗橙黃色にして反口側は黑赤紫色又其邊緣は紫赤色なり．此種は10米より480米に至る海底に生活し相州三崎より九州大分に亘り分布す．

クモヒトデ

Ophioplocus japonicus *H.L. Clark.*

（第五十二圖版　第五圖）　×1.

盤の直徑18粍，腕の長さ60粍なり．盤の背面及腹側間腕部は細鱗片にて覆はれ之等の鱗片は輻楯の附近にて稍ゝ大きく生殖口及口楯の附近に於いて最小なり．輻楯は小にして廣く相離る．口楯は丸味ある菱形，側口板及口板は共に大なり．口棘5個，齒は約5個．背腕板は多數の細鱗に分たれ就中兩側の各1個ご內緣1列を成せる5個の鱗は大なり．腹腕板は幅廣き四角形をなす．側腕板は小形，之に3個の腕棘を生ず．色は濃綠灰色，腕に稍ゝ不規則なる斑點あり．房州，相州の海岸淺所に普通現はるゝ種類にして本州南東沿岸に分布す．

ツルボソテヅルモヅル

Astrodendrum Sagaminum (*Doderlein*).

（第五十二圖版　第六圖）　×1.

盤の直徑は約26粍．間輻緣は深く彎入す．背面より間腕部に亘り厚き皮膚にて包まれ，微細なる顆粒稍密に散布す，其の腹面の緣邊に近きものは尖りたり．輻肋は著しく隆起せず．生殖口は小なり．齒，齒棘及口棘は總べて一樣に針狀を成し尖銳なり．腕は約14回分枝し，全長120粍，背面は密に顆粒にて覆はれ腹面には敷石狀の顆粒あるも皮膚に包まれて平滑なり．色は黃褐色或は褐赤色なり．日本海，九州西部，及び相模灘の120乃至340米の海底に棲息す．

Asterias calamaria *Gray.*

"Yatude-hitode."

Pl. LII, fig. 1.　×1

Radii 7–9, diameter 60 mm., one half of the radius being much shorter than the other. Madreporite 2-3, arm being rather polygonal, and one longitudinal row of spines being situated on central line of aboral side.

Colour of dorsal side dark green, dotted with blue, white and red spots.

Spawning season begins at the end of June. Bipinnalia stage passed during development. Distributed from central part of Japan to southern Kyusyu, living on rocky bottom of the sea.

Asterias versicolor *Sladen.*

"Kihitode."

Pl. LII, fig. 2　×1

Number of Radii 5, its diameter being 100 mm., and that of Inter-radius 20 mm. Arm, being rather narrow at its base, gradually becomes slender towards terminal end. Aboral side highly elevated but oral side flattened. Aboral plate becomes a net-work, more or less roughly. Spines grow sparsely, but run in a longitudinal row plainly on centre line of arm, and a row of irregularly sparsed spines is arranged on both sides. Many pedicellariæ surround these spines. A row of spines runs regularly along lateral margin of arm, forming a super-marginal plate. These spines usually divide lengthwise, half of them projecting against oral side, encircled by pedicellariæ. Spines are arranged in double rows on each side of arm on oral side. Lateral ambulacral plate has a few spines against the ambulacral groove, arrangement of tube-feet is 4 rows. Shape of madreporite is a circular plate, situated near the margin of disc. Colour of margin of aboral side is yellow, that of central portion yellowish grey.

This species lives on the bottom of shallow water at a depth of 16–100 metres southwards from central Japan.

Pseudarchaster pretiosus (*Doderlein*).

"Hadaka-hitode"

Pl. LII, fig. 3.　×1

Number of radii 5. Test is very hard, especially on the oral side, where the ventro-lateral plates are anchylosed with one another.

Disc large and the inter-brachial angles are only a little greater than a right angle. Supramarginals comparatively large and low, covered with small polygonal granules, infra-marginals low like the supra-marginals but broader and slightly more projecting. Adambulacral plates rather narrow, and there are about nine of them for every seven of the infra-marginal plates. Mouth-plates comparatively narrow and elongated. Ventro-lateral plates mostly lozenge-shaped and fast anchylosed with one another. Paxillæ closely set and smallest round centre of the disk. Madreporite very flat and very slightly raised above bases of paxillæ. Terminal plate comparatively large and somewhat elliptical in outline when viewed from aboral side. Colour of aboral side dark red, that of oral side dark orange red.

The bathymetrical range of this species appears to be somewhat wide, being from 20 m. to 480 m. and specimens are collected from the following localities;—Tokyo Bay, Sagami Bay, Uraga Channel, and Misaki.

Asteropecten ludwigi *De Loriol.*

"Murasaki-momidigai."

Pl. LII, fig. 4.　×1

Number of radii 5, largest one reaching 160 mm. in length. Shape of body regularly stellated, notch of inter-radius is almost rectangular. Paxillæ on aboral side very large; there may be as many as seventeen or eighteen peripheral coronal spinelets. The area of small paxillæ at centre of disc very small and not very conspicuous. Madreporite comparatively small, and nearly hemispherical in shape. Terminal plates are large and bi-lobed.

Colour of oral side dark orange yellow, that of aboral side blackish red violet and its margin red violet.

The species lives at a depth of from 10-480 metres distributed from Misaki to Oita.

Ophioplocus japonicus *H. L. Clark.*

"Kumohitode."

Pl. LII, fig. 5.　×1

Diameter of disc 18 mm.; length of arm about 60 mm. Both oral disc and inter-brachial area of aboral side covered with fine scales, the largest of which is situated on the surface of the radial shield, the smallest at the genital aperture and on the oral shield.

Radial shield is small and widely separated. Shape of oral shield is a circular rhomb, both aboral and oral plates being rather large.

Number of oral papillæ and tooth five. Dorsal arm plates become fine scales, each of them being situated on both sides, the five scales of the inner side being arranged in a row.

Ventral arm plate is widely square. Lateral arm plate is small and from it spring 3 arm spines. Colour dark greenish grey, with irregular spots scattered on arm.

The species usually inhabits the shallow sea of Sagami, Tiba province and is distributed along the southern coasts of Honsyu.

Astrodendrum sagaminum (*Doderlein*).

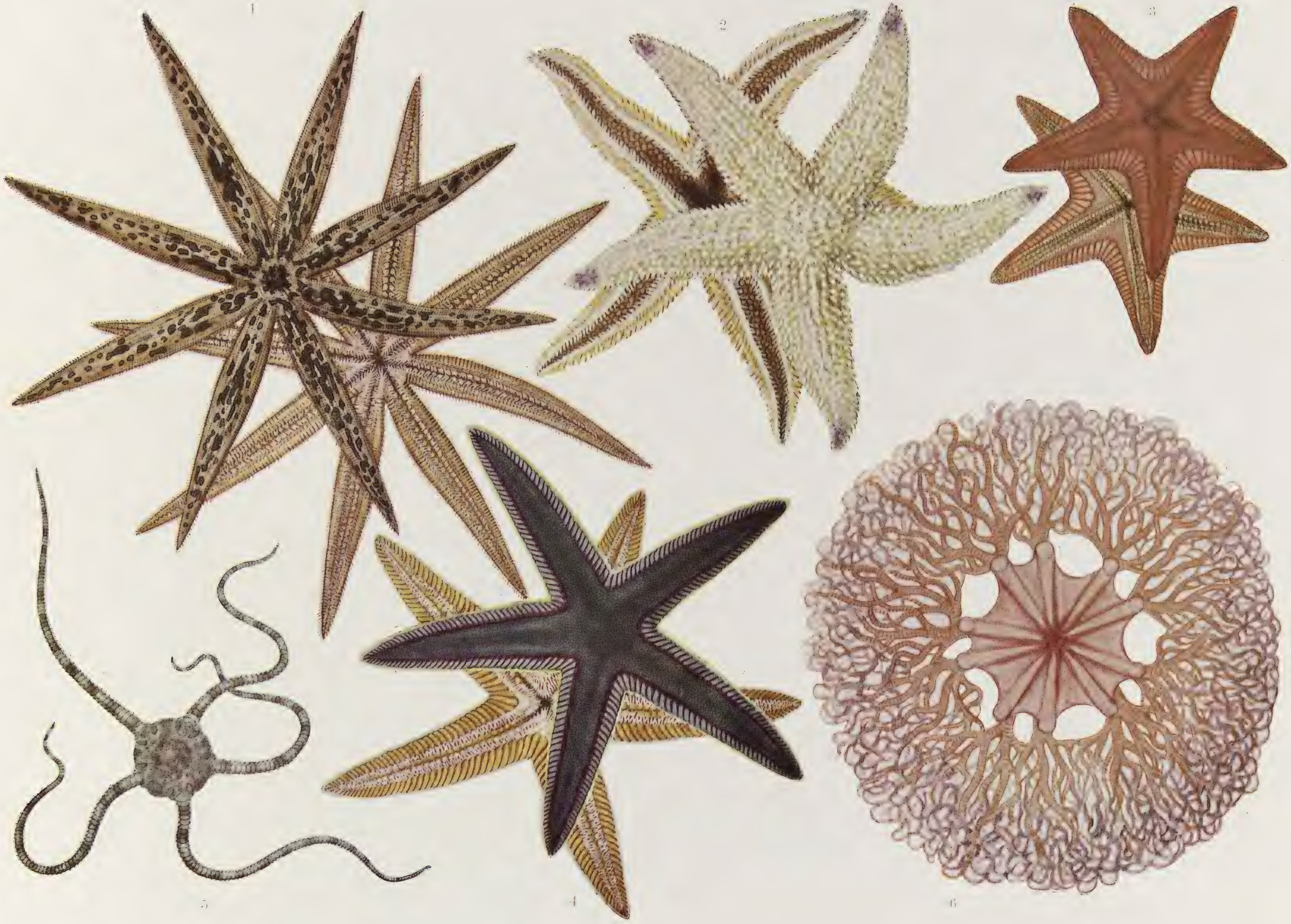
"Turuboso-tezurumozuru."

Pl. LII, fig. 6.　×1

Diameter of disc about 260 mm. Inter-radial margin deeply notched. The portion from aboral side to inter-brachial area is covered with thick integument and densely dotted with fine grains, one of which, situated at the margin of oral side, has a sharp end. Radial rod not projecting remarkably. Genital aperture small. Terminal ends of teeth, tooth spines and oral papillæ having points as sharp as a needle. One arm divided into 14 tines, its total length being 120 mm. Aboral side covered densely with grains; grains pebble-like but are smooth to the touch being covered with integument on the aboral side. Colour yellowish brown or brownish red.

This species inhabits the sea-bottom at a depth of from 120-340 metres and are distributed widely.

第五十二圖版 PL. LII



カシパン

Laganum decagonalis *Less.*

（第五十三圖版　第一圖）　×1.

輪廓は五角形又は十角形にして，殆ご長さこ幅この差異なし．生殖孔5個あり．口側溝は殆ご周緣に達し，圍肛部の位置は後端に位す．殼の直徑は100粍に達す．生時は色彩暗赤色にして乾燥すれば黃褐色に變ず．本州中部より臺灣に亘りて分佈す．タコノマクラこ同樣に他の海產動物に對して有害なり．

タコノマクラ

Clypeaster japonicus *Doderlein.*

（第五十三圖版　第二圖）　×1.

體は扁平にして圓盤形をなし非正輻狀なり．口及び頂上系は背腹兩側の中央線上に位すこ雖肛門は頂板を去りて後方の間步帶に出で，腹側面の外緣に介在す．棘は短小，五步帶は皆殆ご或は全く同一狀態に發達し，各帶毎に花紋像を生ず．本州中央部より南九州に至る淺海に生活す．此の動物の多數繁殖する時は，鳥貝，蛤の如き海產動物は甚しく其の害を被むるこごあり．

スカシカシパン

Astrichypens manni *Verrill.*

（第五十三圖版　第三圖）　×1.

輪廓は殆ご圓形，時こして後方は廣く後緣屢〻直線を成すここあり．口側は扁平にして反口側は緩徐なる隆起をなす．花紋の長さは一樣にして其先端閉づ．口側の輻溝は中心に於て二叉し，外側に於て若干の小枝を派出す．色は暗褐色なり．產卵期は六月にして極めて短期間に變態を遂ぐ．分布區域は本州中部より四國，九州に限られ，淺海の砂底に生活し我國特產種なり．

ブンブクチヤガマ

Schizaster lacunosus (*Linné*).

（第五十三圖版　第四圖）　×1.

體は心臟形をなし扁平ならず，前面中央に淺き縱溝あり，頂板系は背側中心よりも少しく後方に偏し此の直後に於て殼の高さ最大に達す．口は腹面前方に．肛門は背面の後方に開く．後方に存する一對の步帶は極めて短し中間に龍骨狀の隆起を挾み大形顯著なる生殖孔一對を存在す．五步帶は不均等に發達し各步帶の凹陷部，口側中央部及び赤道部に近き部分に長き暗紫色の棘を生ず．腹面の棘は運動の用をなす．殼長約50粍殼幅45粍，殼高37粍あり．大なるものは殼長60粍に達す．我國沿岸16米より240米の海底に廣く分布す．

バフンウニ

Strongylocentrotus pulcherrimus (*A. Agassiz*).

（第五十三圖版　第五圖）　×1.

步帶には大疣二縱列，中疣六縱列，間步帶は大疣二縱列及大さ之に匹敵する中疣五縱列あり．管足は四縱列をなす．殼の直徑35粍にして棘は其の$^{1}/_{7}$內外なり．色は漆綠色を帶ぶ．卵巢は冬より春にかけて成熟す．本州，四國，九州の沿岸に分佈す．此の卵巢を鹽藏醱酵せしめて製したる雲丹は味佳良にして古來より越前雲丹の名あり．

ムラサキウニ

Heliocidaris crassispina (*A. Agassiz*).

（第五十三圖版　第六圖）　×1.

殼の下面は稍平たき球狀をなす．大疣は間步帶こ步帶の無孔部こに二縱列の規則正しき配列をなす．間步帶はその中央及兩側に中疣列あり．殼の直徑60乃至70粍にして，棘は强固色は暗紫色を呈し，其の長さは殼の高さに略〻等し．本邦各地の沿岸岩礁間に棲息す．產卵期は五月より初夏に亘り，容易に人工受精を行ひ得るを以て動物發生學の好材料こなる．卵は鹽藏醱酵せしめて雲丹に製せらる．甚だ美味なり．

アカウニ

Psendocentrotus depressus (*A Agassiz*).

（第五十三圖版　第七圖）　×1.

殼はムラサキウニに似たるも著しく扁平，疣も一層複雜なり．棘は離脫し易く殼の直徑の$^{1}/_{3}$以下なり．殼は鮮紅色にして棘は赤色なり．東京灣以西の各地沿岸に棲息す．產卵期は拾月末なり．

ウミシダ

Comanthus parvicirra (*J. Müller*).

（第五十三圖版　第八圖）　×1.

體は略ぼ倒圓錐形にして大形の脊中板を有し，體壁は上蓋こ反口側の蕚こよりなる．5腕は基部に於て分岐し腕數は40個に達す．各腕には總べて羽枝あり．背枝は背中板の周圍に列生す．口は上蓋の側方に位し食溝は爲めに放射相稱をなさず．色は普通黑褐色，羽枝の末端のみ黃色を呈す．此種は本邦沿岸に最も普通なる淺海產無柄海百合なり．

Laganum decagonalis *Less.*

"Kasipan."

Pl. LIII. fig. 1　×1

Outline of disc is pentagonal or decagonal in form, there being no difference between length and width. Genital pore 5, groove of oral side leads almost to margin of test, the position of the anal aperture being situated at the posterior end. Diameter of test 100 mm.

Colour dark red, but changes to a yellowish brown when dried. Species is distributed in the southern regions of the Empire from central Japan to Taiwan.

Other animals also suffer injury from this animal as in the case of "Takonomakura."

Clypeaster japonicus *Doderlein.*

"Takonomakura."

Pl. LIII, fig. 2　×1

Test a flattened circular disc, no radial symmetry, mouth and apical system situated on the line of the central portion of aboral and oral sides, but anal aperture leads far from the apical plate to the inter-ambulacral zone and opens at the margin of the ventral side of the test. Spine short, five amblacral zones develop along side each other being of the same character and the petal figures being marked on each zone.

This animal inhabits shallow water from the central coast of Honsyu to that of southern Kyusyu.

When these animals propagate in large quantities other marine animals, such as cockles and clams, suffer much injury from their attacks.

Astrichypens manni *Verrill.*

"Sukasi-kasipan."

Pl. LIII, fig. 3　×1

Outline of test almost round, the posterior margin widens, or is often nearly straight. Oral side flattened, aboral side moderately elevated. Petal figures are symmetrical and their terminal end closed.

Radial groove of oral side is forked at the centre and branched on the outer side. Colour dark brown.

Spawning season is June and period of development of eggs is short. Distribution restricted to the area from the central coast of Honsyu to Sikoku and Kyusyu. It inhabits the sandy bottom of shallow water in Japan only.

Schizaster lacunosus (*Linné*).

"Bunbukutyagama."

Pl. LIII, fig. 4　×1

Body heart-shaped, not flattened, having a longitudinal groove from central portion of frontal surface of body. Apical system situated at back of centre of aboral side, and test is highest behind apical system. Mouth opens at anterior part of actinal, and anus at posterior part of aboral side. One pair of posterior ambulacral zones is very short.

One pair of large genital apertures opens strikingly between keel-like ridges. The 5 ambulacral zones develop unequally; fairly long spines exist in the ambulacral zones, the oral centre portion and the ambites; colour of these spines dark purple. The oral spines are used for movement. Length of test about 50 mm. Width 45 mm. height 37 mm. the largest specimen being 60 mm. in length.

This is distributed on sea-bottom at a depth of from 16 to 240 metres round the coast of Japan.

Strongylocentrotus pulcherrimus (*A. Agassiz*).

"Bahun-uni"

Pl. LIII, fig. 5　×1

There are 2 vertical rows of primary tubercular zones, 6 vertical rows of secondary tubercular zones in the ambulacral zone. In the inter-ambulacral zone are arranged 2 primary and 5 secondary tubercular zones which are equal in size to that of the primary tubercular zones.

Tube-feet arranged lengthwise in 4 rows. Diameter of test 35 mm. and length of spine $^{1}/_{7}$ of that of test.

Colour light green. Ovary matures from winter to spring. Species is distributed from Tokyo Bay to the coasts of Sikoku and Kyusyu in Japan.

The name "Etizen-uni" was known in ancient times in Japan. It is made from the ovary of this animal, which is salted and fermented.

Heliocidaris crassispina (*A. Agassiz.*)

"Murasaki-uni."

Pl. LIII fig. 6　×1

Oral side of test rather flattened and spherical. Primary tubercles have 2 vertical regular arrangements of the inter-ambulacral zone and the inter-poriferous zone. Inter-ambulacral zone forms a secondary tubercle zone in its middle part and on both its sides. Diameter of test from 60 to 70 mm. Spine stiff, its length almost equal to height of test and colour dark green.

This species live among the rocks in shallow water everywhere in Japan. Spawning season is from May to early summer.

It is a good subject for experimental tests in embryology as artificial fertilization is easily carried out. "Uni" made from the ovary, which has been salted and fermented, is very delicious.

Pseudocentrotus depressus (*A. Agassiz.*)

"Aka-uni."

Pl. LIII, fig. 7　×1

Test flattened and primary tubercle complicated, nearly as much as remarkably that of "Heliocidaris crassispina."

Spine can be separated easily from test, its length being less than $^{1}/_{3}$ of diameter of test.

Colour of test brilliant red and that of spine also red.

This species inhabit all parts of the west coast of Japan from Tokyo Bay. Spawning season at end of October.

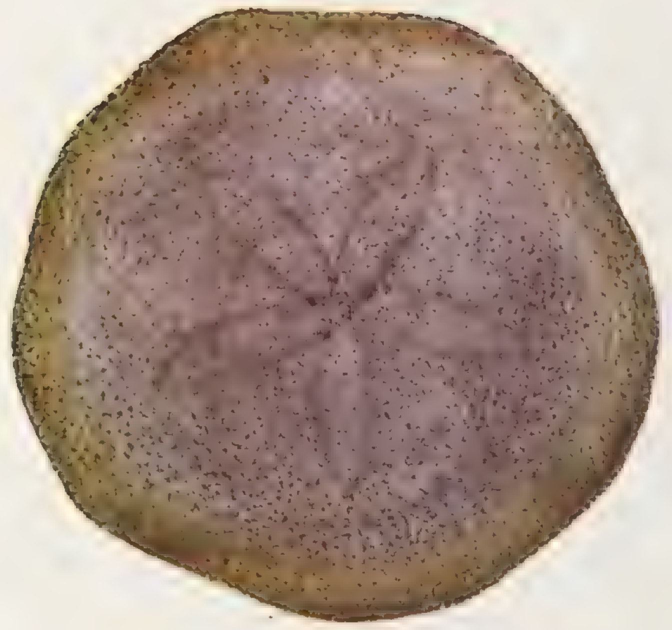
Comanthus parvicirra (*J. Müller.*)

"Umisida."

Pl. LIII, fig. 8　×1

Body of an inversed conical shape. Apical plate large. Somatical-wall composed of tegmen and theca of aboral side. Each of the 5 arms divide and become 40 tentacles, these being provided with pinnules. Dorsal cirri encircle apical plate. Food-groove not radially symmetrical because of eccentric position of mouth on tegmen.

Colour is blackish brown, terminal end of pinnules yellow. This species is one of the stemless crinoidea, being most common on the bottom of shallow water of Japan.



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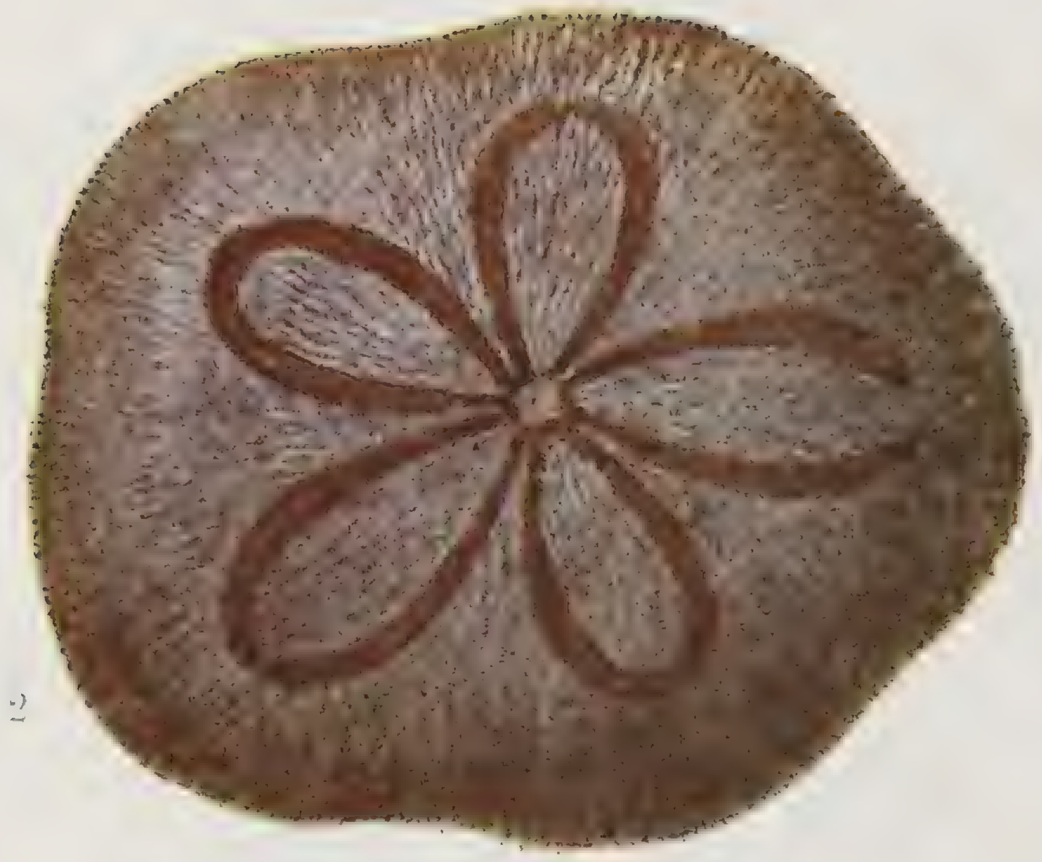

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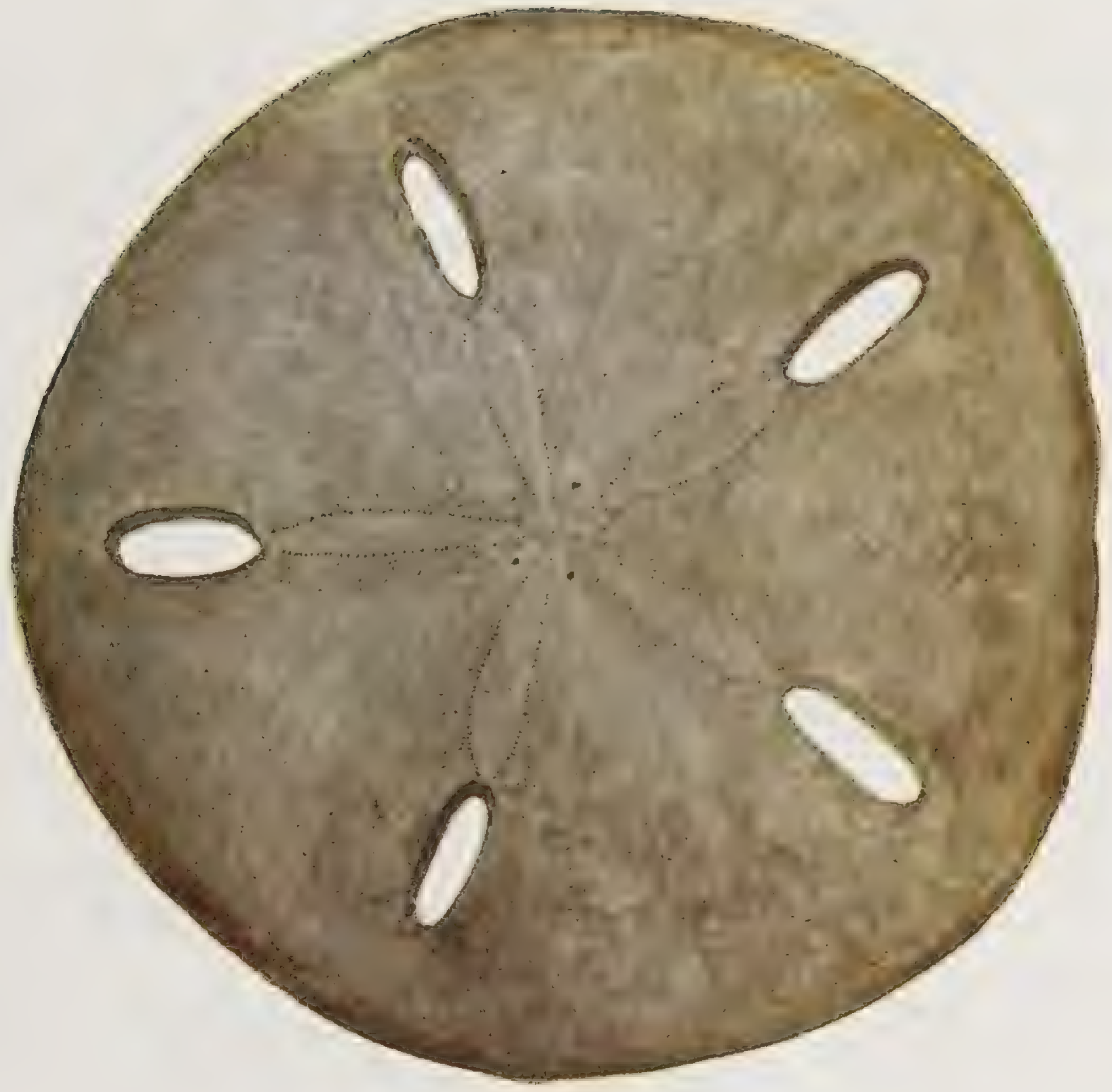

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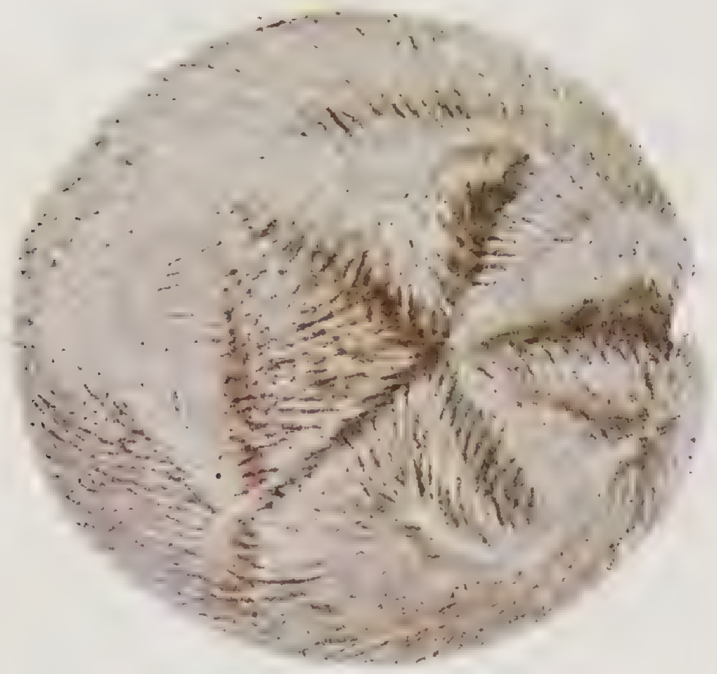

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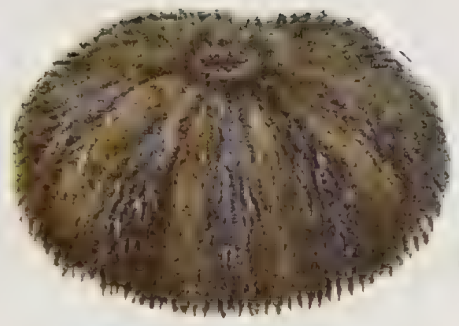

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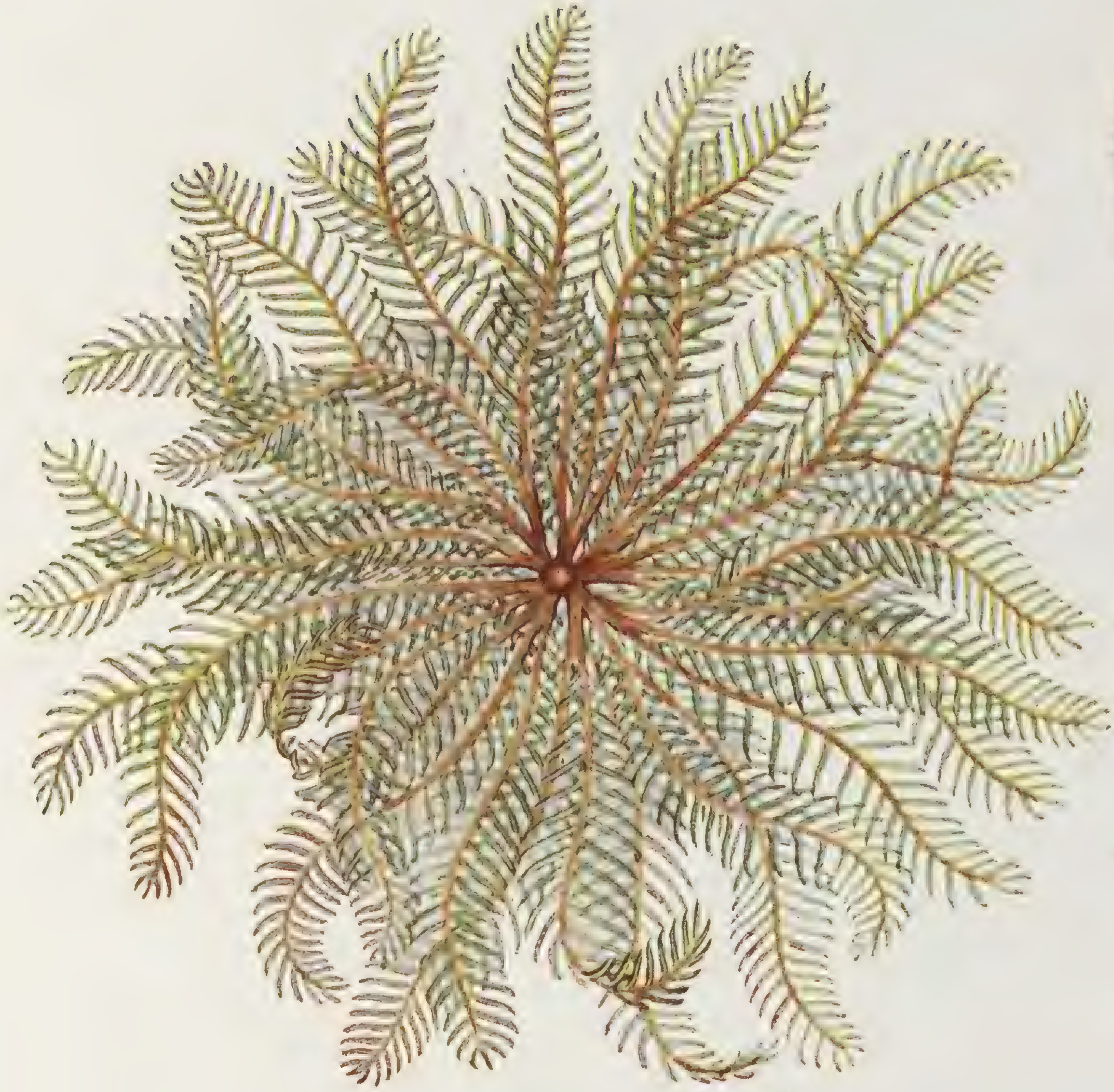

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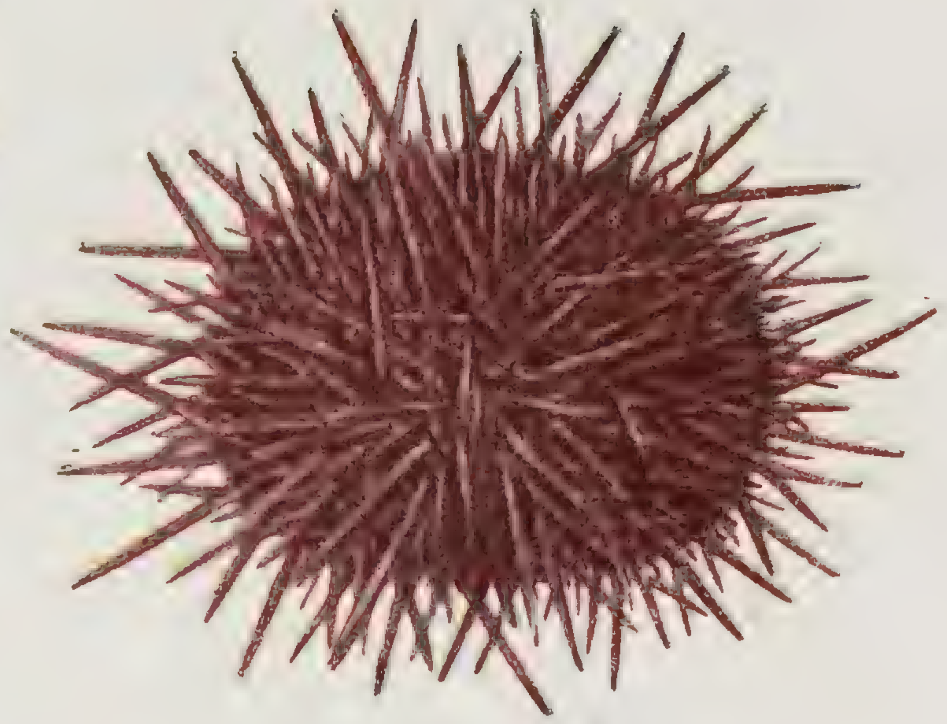

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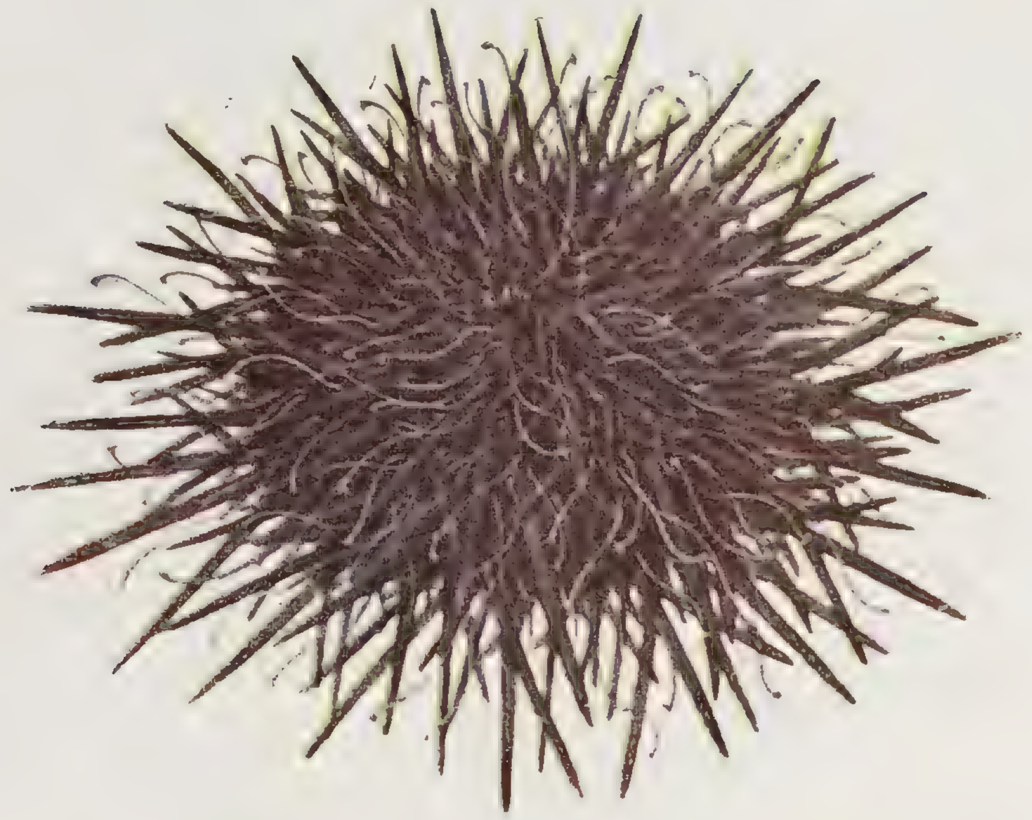


6

ONAL MUSEUM

キメンガニ

Dorippe dorsipes (*Linné*)

（第五十四圖版　第一圖雄 第二圖雌）　×1

頭胸部背甲及び脚は密に毛を以て蔽はる．但し趾節及び前節は然らず．頭胸部背甲上の胃域，心域，鰓域の區劃は明瞭ならず．體色はやゝ褐色なり．本邦の太平洋沿岸に廣く分布す．

ツノナガコブシガニ

Leucosides longifrons (*de Haan*)

（第五十四圖版　第三圖）　×1

頭胸部背甲は堅く，陶器樣光澤あり．胃域に近く四白點を見る．鉗脚は大にして，長節上に先端赤き瘤體多數あり．步脚は細長く，黃及び赤の橫條あり．

淺海の砂底に棲み，本邦に普通なり．

テナガコブシガニ

Persephora fugax (*Fabricius*)

（第五十四圖版　第四圖）　×1

甚だ長き鉗脚を有し，その長節が頭胸部背甲の幅の二倍の長さに達することを特徴とす．頭胸部背甲の後緣には三棘ありて，その中央のもの最大なり．

淺海の砂底に生活し，日本沿岸に廣く分布す．

トラフマンヂユウ

Calappa lophos (*Herbst*)

（第五十四圖版　第五圖）　×1

頭胸部背甲は著しく凸出し，殆ど半球狀をなす．その全緣に亘りて細鋸齒にて緣どられたる齒併立す．後側緣には四齒ありて，且つ他のものより大なり．

南日本に產す．

ヒシガタマンヂユウ

Mursia armata *de Haan*

（第五十四圖版　第六圖）　×1

頭胸部背甲は密に細かき瘤體を以て蔽はれ，且つ大なる瘤體も存在し，大なる方は縱列に配置せらる．頭胸部背甲の側棘は，頭胸部背甲の幅の半に達す．鉗脚の長節には三棘ありて，その中の一つ甚だ大なり．

日本には普通なる方なり．

ベニホシマンヂユウ

Liagore rubromaculatus *de Haan*

（第五十四圖版　第七圖）　×1

頭胸部背甲は卵圓形，平滑にして前緣は二葉に分たる．鉗脚は強大にして，毛なし．步脚は細長く，趾節に毛を生ぜり．

頭胸部背甲及び脚は赤色にして，白緣あるカーミン色の點存在す．日本の太平洋沿岸に廣く分布す．

アサヒガニ

Ranina ranina (*Linné*)

（第五十四圖版　第八圖）　×1

頭胸部背甲は前方に從ひ，その幅廣く．その前側緣には三齒狀の突起三箇あり．前緣に近く毛を密生し且つ低くなれり．この低下部より後の部分には小なる棘を密生す．鉗脚は側扁し，捩れ居り，掌部はその上緣に二齒，下緣に五齒あり．步脚は甚だしく扁平化し，最後の二對の步脚はその長節に長毛あり．

頭胸部背甲及び脚は赤く，頭胸部背甲上にある棘は白し．日本の太平洋沿岸に廣く分布す．

Dorippe dorsipes (*Linné*)

"Kimen-gani"

Pl. LIV, fig. 1, ♂; fig. 2, ♀.　×1

Thickly beset with bristles on the carapace and legs, except dactylus and propodus of each leg. Stomachal, cardiac, and branchial regions of the carapace not distinctly defined. Brownish in colour. Widely distributed along the Pacific coast of Japan.

Leucosides longifrons (*de Haan*)

"Tunonaga-kobusigani"

Pl. LIV, fig. 3　×1

Carapace hard, glossy with porcelain lustre, with four white spots near stomachal region. Chelipeds massive, with a number of white-tipped tubercles on the merus. Ambulatory legs slender, striped with red and yellowish cross bands.

Inhabits sandy bottoms of shallow sea. Common in Japan.

Persephora fugax (*Fabricius*)

"Tenaga-kobusigani"

Pl. LIV, fig. 4　×1

Characterized by having very long chelipds, meropodites of which about two times as long as the breadth of the carapace and nearly as long as the hand. Posterior margin of the carapace provided with three spines, middle one of which much stronger.

Lives on sandy bottoms of shallow water of the sea. Widely distributed along the coasts of Japan.

Calappa lophos (*Herbst*)

"Torahu-manzyû"

Pl. LIV, fig. 5　×1

Carapace strongly swollen, almost hemispherical in shape, the whole margin provided with serrulated teeth, postero-lateral ones of which are four in number and much larger than the others.

Occurs in Southern Japan.

Mursia armata *de Haan*

"Hisigata-manzyû"

Pl. LIV, fig. 6　×1

Carapace compactly beset with fine tubercles, and tubercles of considerable sizes are arranged in several longitudinal rows on it. Lateral spines of the carapace nearly half the width of the carapace. Merus of the chelipeds provided with three spines, one of which much longer.

Rather common in Japan.

Liagore rubromaculatus *de Haan*

"Benihosi-manzyû"

Pl. LIV, fig. 7　×1

Carapace oval, smooth, with front slightly bilobed. Chelipeds massive, and hairless. Ambulatory legs slender, dactylus pubescent.

Carapace and chelipeds reddish in colour, white-margined carmine red spots present on carapace and chelipeds. Widely distributed along the Pacific coast of Japan.

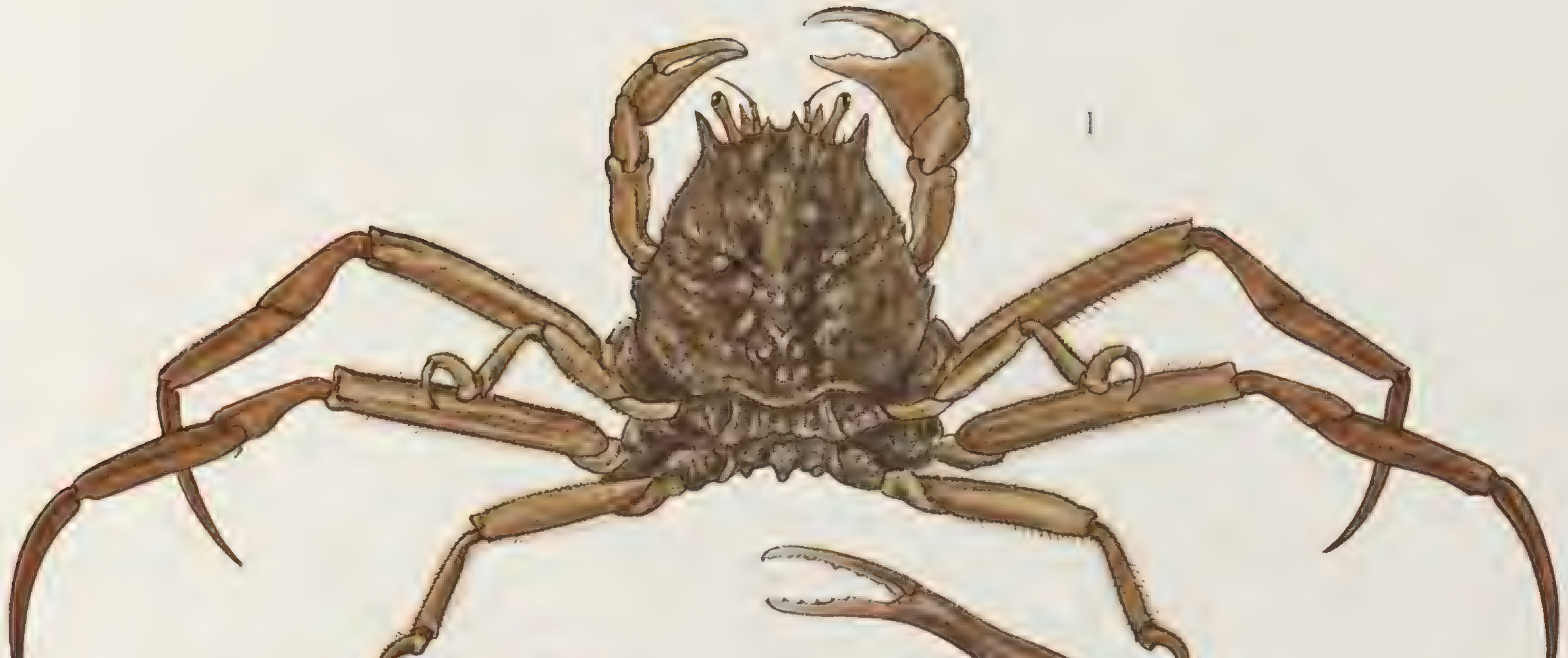
Ranina ranina (*Linné*)

"Asahi-gani"

Pl. LIV, fig. 8　×1

Carapace broadened anteriorly, three tridentate processes on antero-lateral borders, pubescent and depressed near anterior border, thickly beset with small spines posterior to this depression. Chelipeds compressed, twisted, palm with two teeth on the upper border and five teeth on the lower. Ambulatory legs much compressed, last two pairs with long bristles on the margins.

Carapace and legs red in colour, spines on the carapace white. Widely distributed along the Pacific coast of Japan.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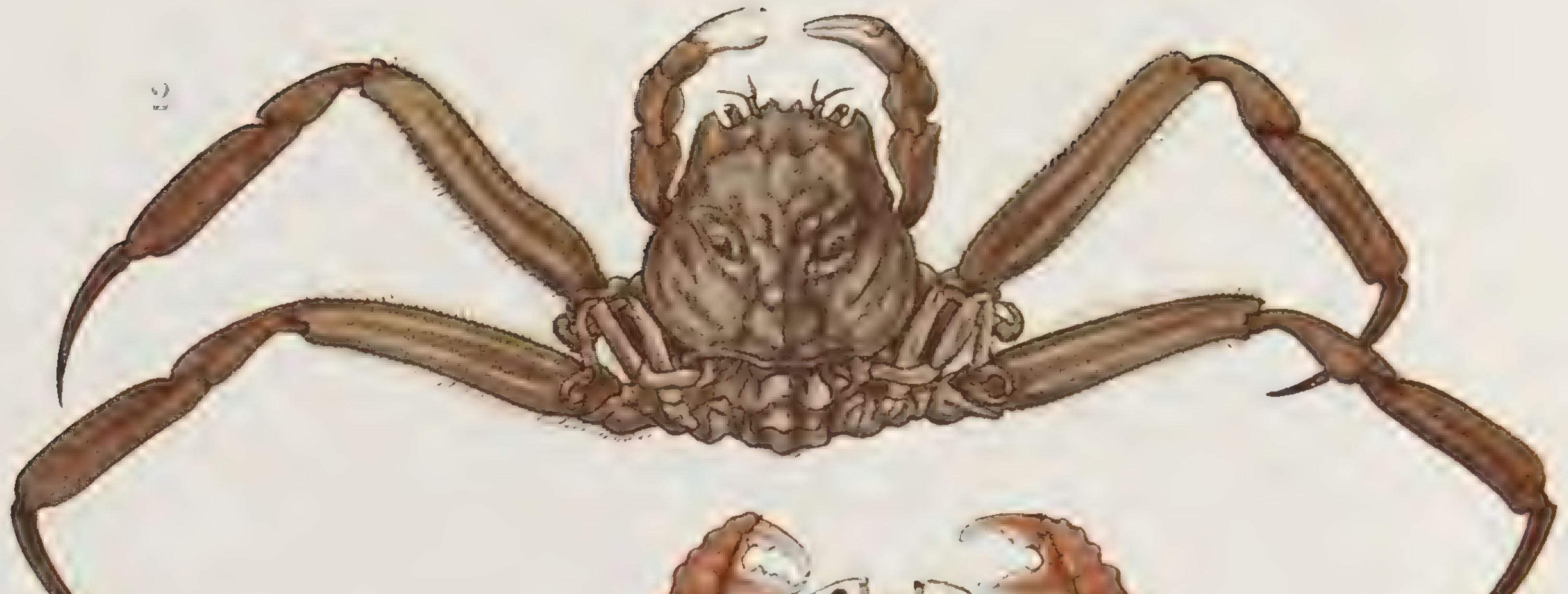
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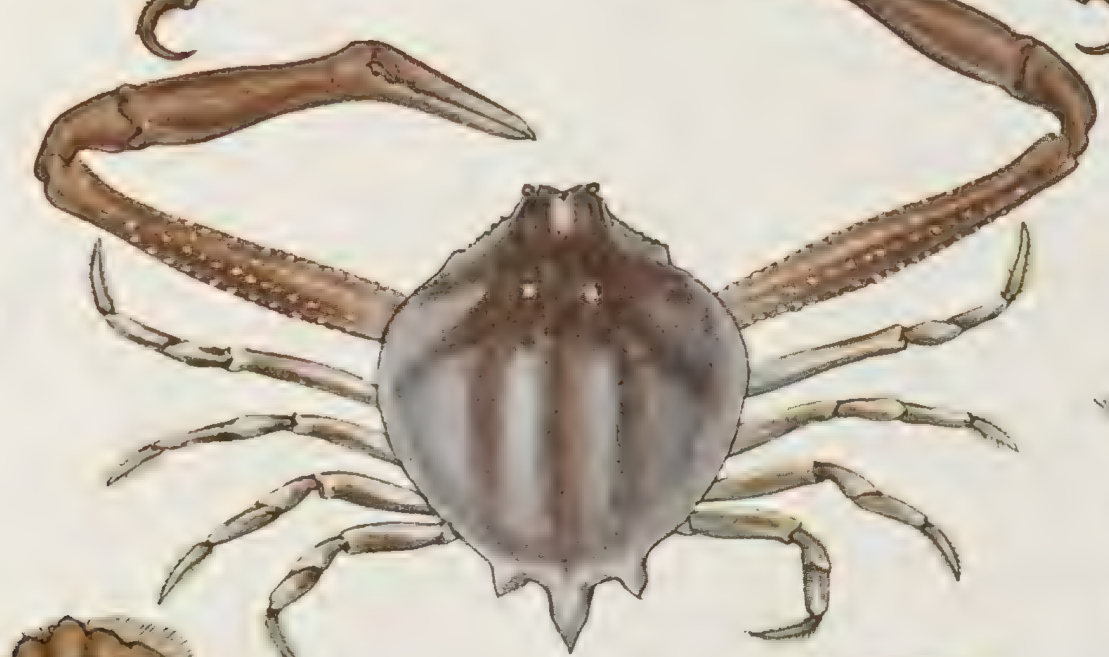
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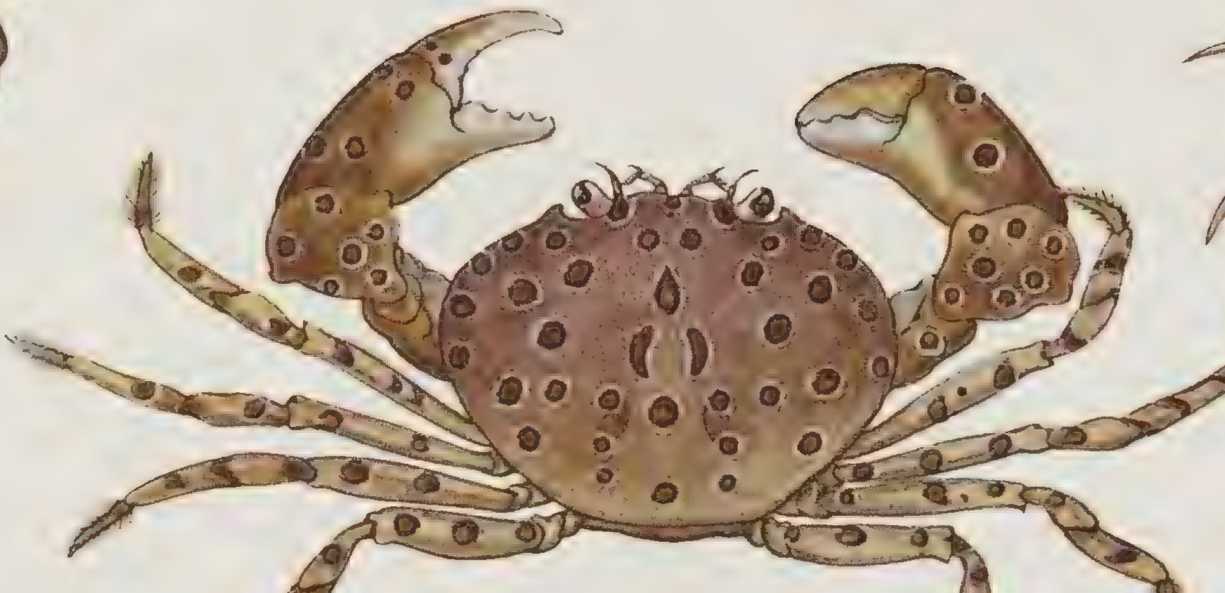
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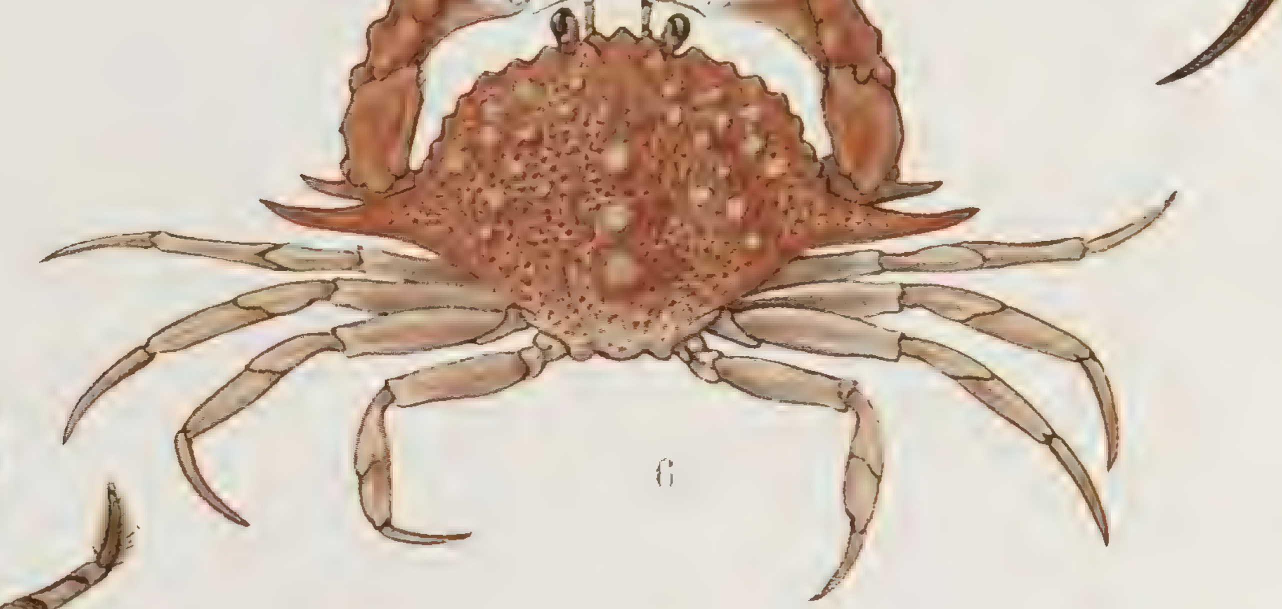
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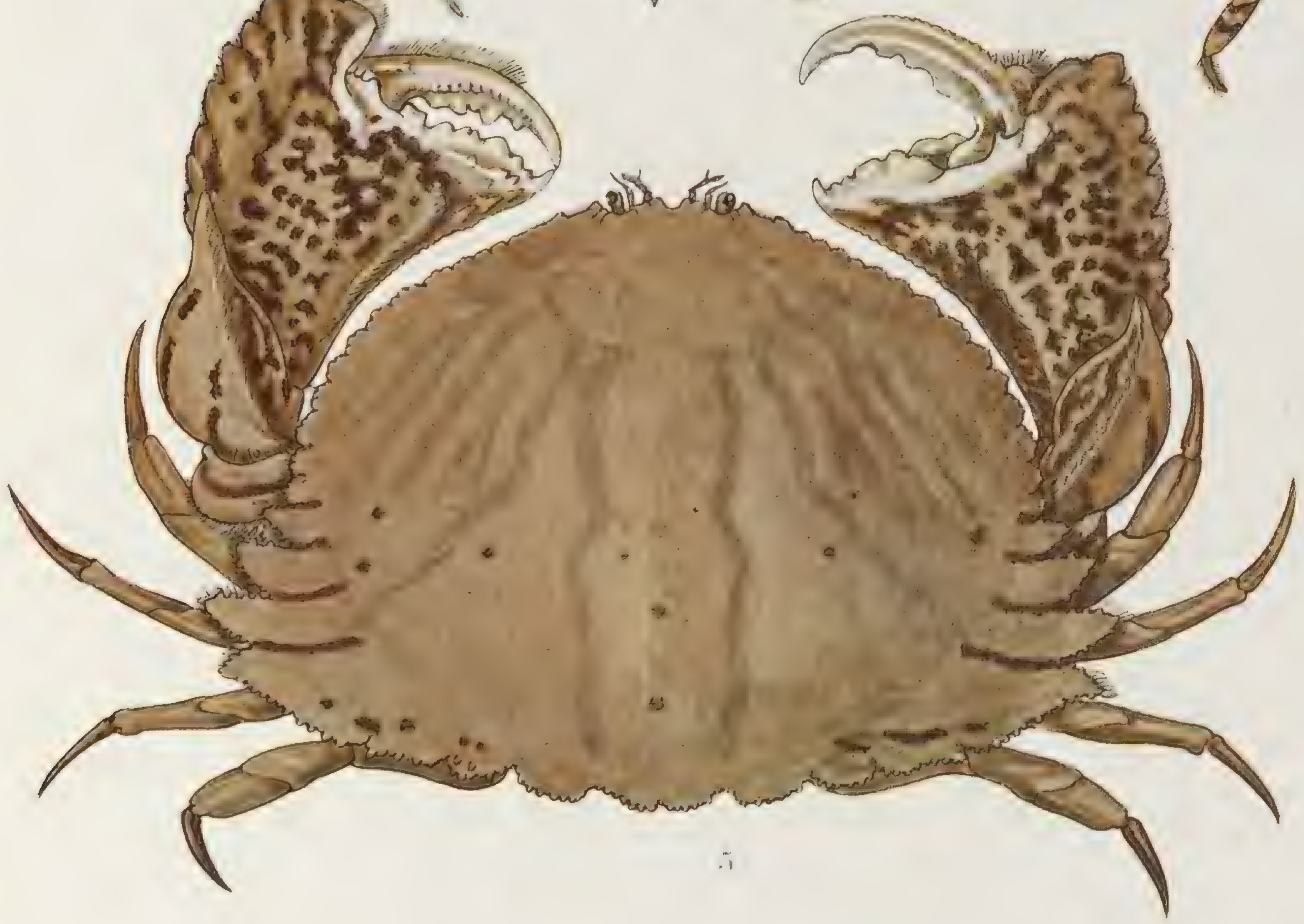
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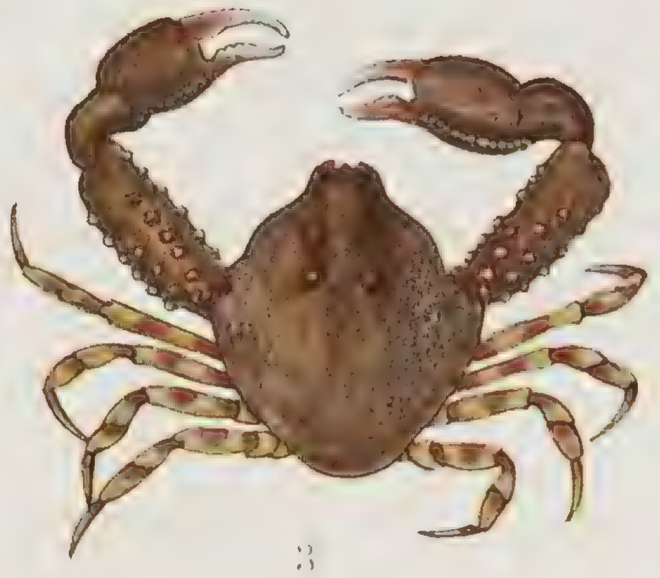
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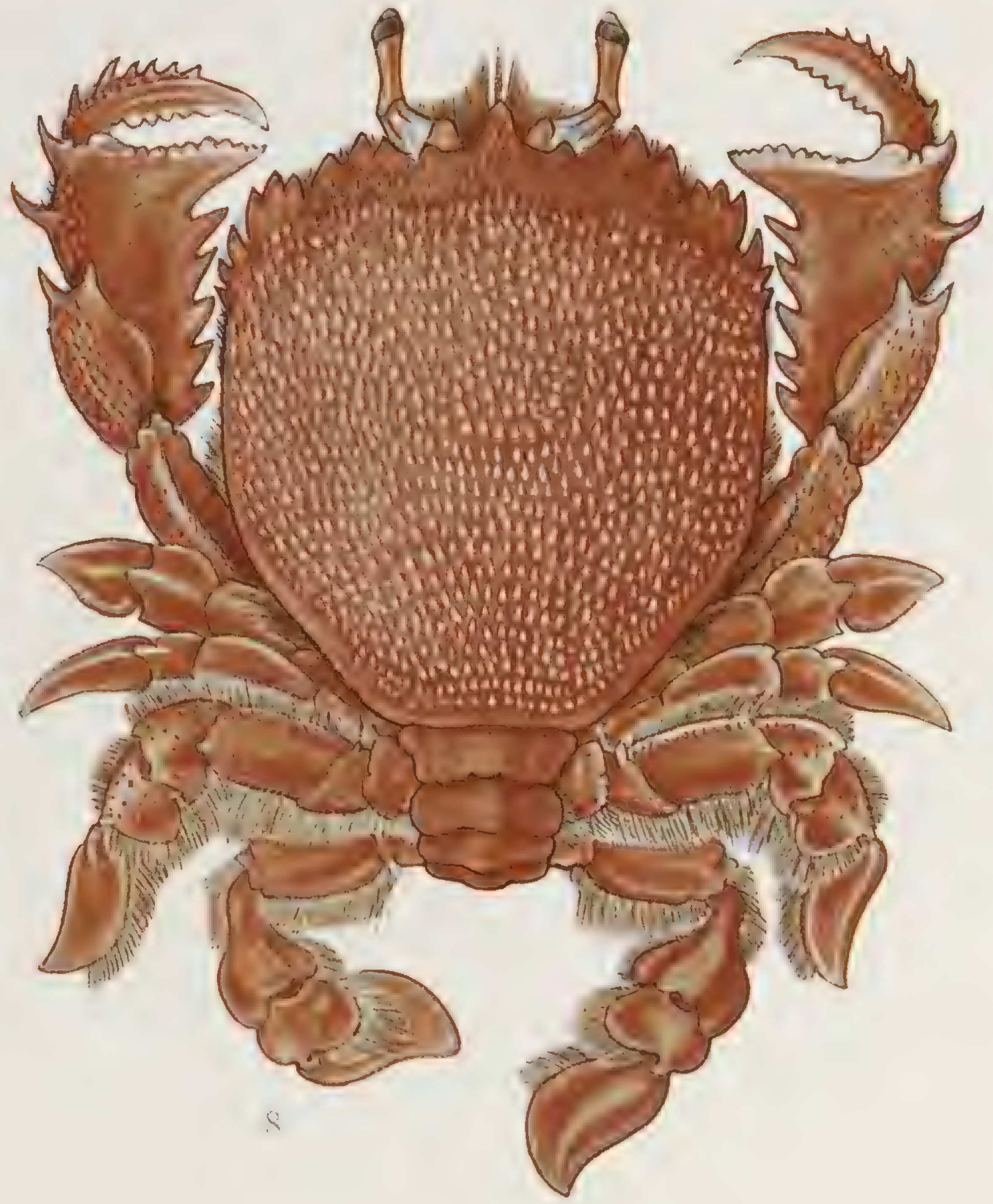
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ヒラスナガニ

Macrophthalmus depressus (*de Haan*)

（第五十五圖版　第一圖）×1

頭胸部背甲は平たく，その前緣は頭胸部背甲の幅の十分の一にして，眼窩棘の後に一齒あり．鉗脚は長節に毛を生じ，腕部，手部には毛なく，鉗はスプーン狀なり．步脚は長節の背緣に長毛あり．

生きたるものゝ色は灰綠色．泥質海底に穴を穿ちて棲む．南日本に普通なり．

イシガニ

Charybdis sexdentata (*Herbst*)

（第五十五圖版　第二圖）×1

銳き齒を頭胸部背甲の前緣及び前側緣に有することによりて，他の種と容易に區別さる．頭胸部背甲前側緣の齒は六個にして，且つほゞ同大なり．平滑なるものも，有毛のものもあり．

アルコホル漬標本の色はやゝ赤く，鉗脚には白斑あり．淺海の砂底上，岩石間に生活し，南日本に廣く分布す．

イテフガニ

Cancer japonicus *Ortmann*

（第五十五圖版　第三圖）×1

頭胸部背甲は凸出し，細かに粒狀體を以て蔽はれ，且つ結節狀の膨出體數多あり．前緣及び前側緣は齒狀なり．上面紫褐色にして下面は黃白色，趾は黑く，日本に普通なり．

ヒシガニ

Parthenope laciniata (*de Haan*)

（第五十五圖版　第四圖）×1

頭胸部背甲はやゝ菱形にして，その緣は細齒にて緣どられたる齒を具ふ．平たき小瘤體存在し，鰓域は中央に存する區域とは深き溝にて分れる．鉗脚は隆起線を具へ，その上に强大銳尖にして，粒體にて蔽はれたる齒を有す．この齒の大きさは一定せず．步脚は小にして弱く，扁平にして，緣に棘あり．

上面黃褐色にして，下面は色薄し．手部はその先端濃紅褐色．淺海の泥底に棲み，南日本には甚だ普通なり．

ズワイガニ

Chionecetes phalangium (*Fabricius*)

（第五十五圖版　第五圖）×¼

頭胸部背甲は殆ど圓形にして，前緣及び前側緣には大きさを異にする齒あり．粒體にて蔽はれたる瘤體多數存在し，若きものにては毛あれども成體にては毛なし．鉗脚は他の脚よりも甚だ短く，趾部は掌部よりも長く，第五脚は第二乃至第四脚よりも短し．

新潟，石川兩縣の沿岸に多く，朝鮮東岸及び樺太西岸にも產す．美味なり“Corean crab”として輸出せらる．

モクズガニ

Eriocheir japonicus *de Haan*

（第五十五圖版　第六圖）×1

頭胸部は殆ど方形にして，隅角丸味あり．外眼窩棘の後に二棘を有す．鉗脚は大にして，手部は長き毛を生ずれども趾部には毛なし．

灰色又は褐色を帶び，細かに白斑を散布す．千島より臺灣に至るまで廣く分布す．川口に近き淡水又は半鹹水中に生活す．春夏の候，水田又は河川に生活し，秋冬に至れば海中へ降り，翌春再び遡り來るものもあり．

タカアシガニ

Macrocheira kaempferi *de Haan*

（第五十五圖版　第七圖）×1/12

頭胸部背甲は西洋梨狀にして，額は二個の强大にして先端の開ける齒に分る．表面は疎にして，區域明なり．脚は甚だ長く，鉗脚の趾節には約1ダースの白く圓き齒を具ふ．

頭胸部背甲及び脚には赤及び黃の斑あり．世界最大の蟹にして，鉗脚を橫に伸せば約三米半に達す．美味なり．南日本の百乃至二百米の泥質海底に棲む．頭胸部背甲の凹部に漁夫は墨を入れ，恐ろしき面相となし，厄除として家の入口に揭ぐ．

オホクリガニ

Erimacrus isenbeckii (*Brandt*)

（第五十五圖版　第八圖）×½

頭胸部背甲は密に剛毛及び棘にて蔽はれ，前側緣には細齒にて緣どられたる棘あり．その齒は後方のものほど小なり．脚又は剛毛及び棘を生ず．

體色は黃にして，棘は赤く，寒海に棲み，特に北海道に多し．

Macrophthalmus depressus (*de Haan*)

"Hirasuna-gani"

Pl. LV, fig. 1　×1

Carapace depressed, front one-tenth as wide as the carapace, one tooth present behind outer orbital spine. Chelipeds pubescent on merus but hairless on wrist and hand, chelae spooned. Ambulatory legs provided with long hairs on the dorsal border of merus.

Colour in life grayish-green. Burrows in muddy bottoms; common in southern Japan.

Charybdis sexdentata (*Herbst*)

"Isi-gani"

Pl. LV, fig. 2　×1

Easily distinguished by its sharp frontal and antero-lateral teeth from allied species. Antero-lateral teeth of the carapace six in number, and nearly same in size. Some specimens glossy and others pubescent.

Colour in spirit reddish, chelipeds mottled with white. Lives among rocks and stones on coarse, sandy grounds of shallow sea; widely distributed in southern Japan.

Cancer japonicus *Ortmann*

"Ityô-gani"

Pl. LV, fig. 3　×1

Carapace convex, minutely granulated, with nodular swellings, anterior and antero-lateral margins dentate.

Colour dark purplish-brown above, yellowish white below, fingers black. Common in Japan.

Parthenope laciniata (*de Haan*)

"Hisi-gani"

Pl. LV, fig. 4　×1

Carapace rhomboid in outline, margins with denticulated teeth, covered with small flattened tubercles, branchial regions separated from median ones by deep depressions. Chelipeds with strong, acute, granulated teeth along the keels; teeth varying in size. Ambulatory feet small and weak, compressed, spinous along edges.

Yellowish-brown in colour above, paler below; hands tipped with a dark mahogany colour. Inhabits muddy bottoms of shallow water; very common in the seas of Southern Japan.

Chionecetes phalangium (*Fabricius*)

"Zuwai-gani"

Pl. LV, fig. 5　1/4

Carapace almost circular in outline, anterior and antero-lateral borders with teeth of unequal sizes, surface covered with granulated tubercles, hairy in young specimens but not in adult ones. Chelipeds much shorter than the other legs, with fingers longer than palm. Fifth feet shorter than second to fourth pairs of legs.

Abundant along the coasts of Isikawa and Niigata Prefectures, also found though in much smaller number along the eastern coast of Chôsen and western coast of Saghalin. Very tasty, canned food exported under the name of "Corean crab."

Eriocheir japonicus *de Haan*

"Mokuzu-gani"

Pl. LV, fig. 6　×1

Carapace almost quadrate, with corners rounded off, two teeth behind outer orbital tooth. Chelipeds massive, hand covered with long hairs, fingers naked.

Grayish or brownish in colour, finely mottled with white. Widely distributed from Kurils to Formosa; inhabits muddy bottoms of fresh and brackish waters near the estuaries; some specimens live in rice fields or rivers in warmer seasons and go down to the sea in colder seasons and come back again next spring.

Macrocheira kaempferi *de Haan*

"Taka-asi-gani"

Pl. LV, fig. 7　×1/12

Carapace pear-shaped in outline, front divided in two strong divergent teeth. Surface rough, regions well defined. Legs very long, fingers of the chelipeds with about a dozen of white rounded teeth on inner surfaces.

Carapace and legs variegated with red and yellow. Largest crab in the world, chelipeds when stretched transversally cover a distance of three metres and a half. Delicious in taste. Lives on muddy bottoms in 100–200 metres of Southern Japan. Carapace used by fishermen as a charm against ill-luck, grooves on its surface being painted black to make an appearance of a terrific face, and put above the entrance of their houses.

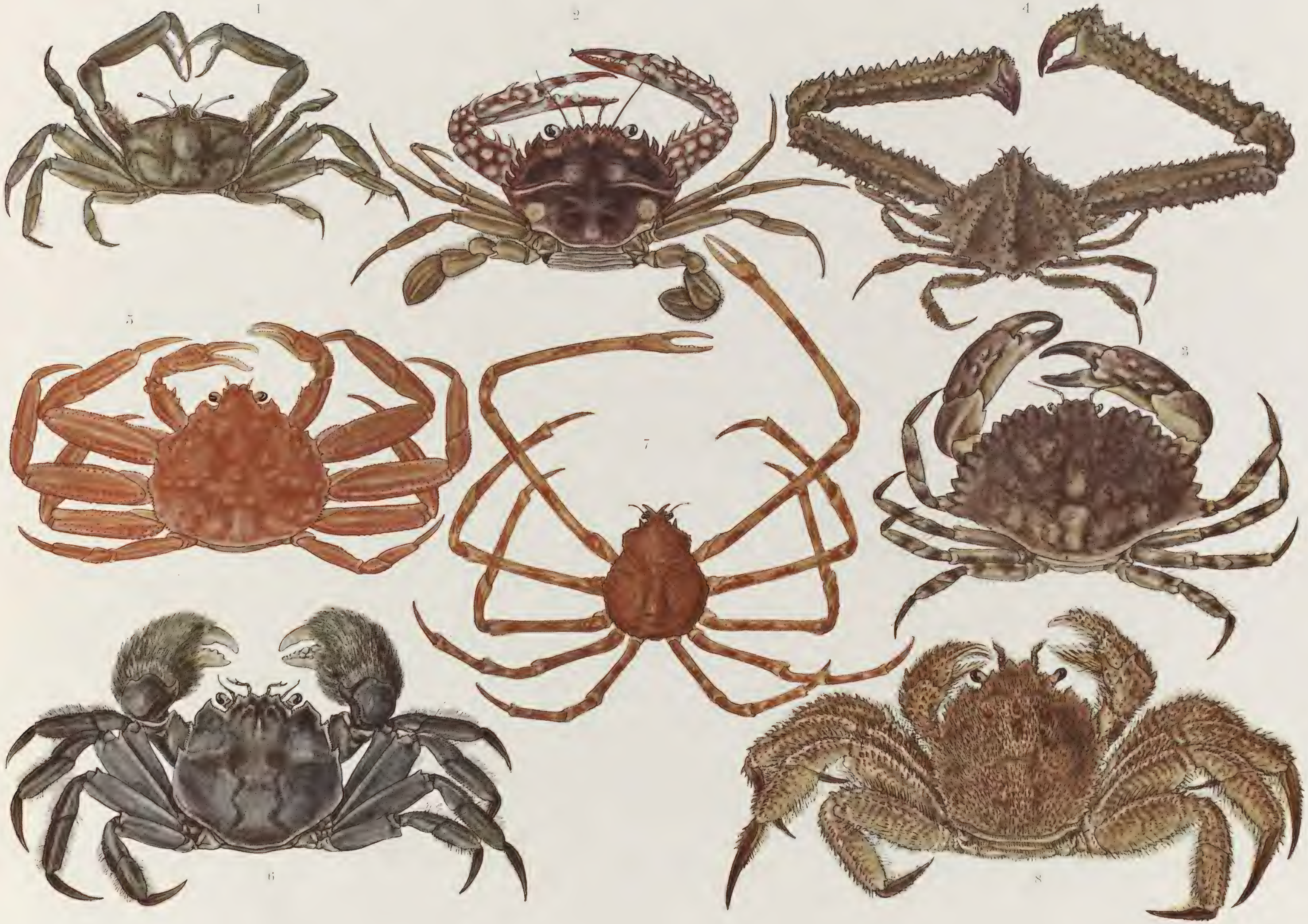
Erimacrus isenbeckii (*Brandt*)

"Ookuri-gani"

Pl. LV, fig. 8　×1/2

Carapace thickly beset with bristles and spines, denticulated teeth on the antero-lateral margins smaller posteriorly. Legs covered with bristles and spines.

Colour yellowish, spines reddish. Inhabits colder seas of Japan, especially abundant in Hokkaidô.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[illegible] than 150 mm. [illegible] Southern Japan especially abundant [illegible] in Southern [illegible]

[illegible] rounded in outline, front with four [illegible] present near the [illegible] the chelipeds armed [illegible]

[illegible] along the coasts of Japan. [illegible]

[illegible] above, hand smooth [illegible] dactylus slightly curved.

Carapace [illegible] brownish [illegible]

Lobatea [illegible]

Charybdis [illegible]

アカテガニ

Sesarma haematocheir (*de Haan*)

（第五十六圖版　第一圖）×1

頭胸部背甲は方形．前縁は殆ど直線狀，溝あり．鉗脚は大にして，手部は平滑なり．

頭胸部背甲は前縁に近き所赤く後部は青灰色なり．鉗脚は赤く，趾部は白し．步脚は青灰色，海岸に近き陸上に棲む．甚だ普通なり．

コシマガニ

Paramithrax edwardsii (*Ortmann*)

（第五十六圖版　第二圖）×1

頭胸部背甲は無毛，縁及び表面に棘あり．鉗脚は先づ細長き方にして，長節及び腕節はその上面に先端の尖れる瘤體あり．手部は平滑．步脚は細長く，趾節は少しく曲れり．

頭胸部背甲は綠灰色にして，褐色の點を散佈す．南日本に產す．

サナダミヅヒキガニ

Latreillia valida (*de Haan*)

（第五十六圖版　第三圖）×1

頭胸部背甲は西洋梨狀にして，額部は甚だ狹く，前側縁に丸味ある二個の突起を有す．

頭胸部背甲はやゝ褐色にして，黑斑あり．脚は赤と黃との斑紋あり．日本の沿岸に普通なり．

イシガニ

Charybdis sexdentata (*Herbst*)

（第五十六圖版　第四圖）×1

本圖は第五十五圖版第二圖に描けるものと同種にして，生ける材料にては，上面は概ね青灰色，下面は黃色，鉗脚の趾節は紅褐色をその背面に呈す．

ノコギリガザミ

Scylla serrata (*Forskâl*)

（第五十六圖版　第五圖）×1

頭胸部背甲は凸出し，四齒を具ふる前縁及び九齒を具ふる脚前側縁は他の部分よりも窪めり．表面は平滑なり．鉗脚は强大にして，長節の內縁に三棘を有し，腕部の背面末縁に二棘を有す．頭胸部背甲が百五十粍にも及ぶものあり．

南日本，特に臺灣に多產し，南臺灣にては盛んに養殖せらる．美味なり．

ガザミ又はワタリガニ

Portunus trituberculatus (*Miers*)

（第五十六圖版　第六圖）×½

頭胸部背甲はやゝ菱形にして，前縁には四棘あり．甲の中央近くに三個の瘤棘を有す．鉗脚の長節は三角柱狀にして，その內縁に四棘あり．

頭胸部背甲及び脚は紫灰色を上面に呈し，下面は白色なり．白斑を甲及び鉗脚，第五脚の背面に認むることを得．鉗脚の趾部は紅褐色なり．日本の沿岸に普通なり．晝間は砂底に潛み，夜間海表近くを群をなして游泳す．食用として廣く用ひらる．甚だ美味なり．

エンコウガニ

Carcinoplax longimanus (*de Haan*)

（第五十六圖版　第七圖）×1

頭胸部背甲及び脚は平滑にして殆ど毛なし．但し步脚の最後の三節は僅に毛を生ず．鉗脚は甲羅の幅の三倍半の長さあり．掌部の內面と長節の背縁とにはそれぞれ顯著なる瘤體一個あり．

南日本に產す．

Seaarma haematocheir (*de Haan*)

" Akate-gani "

Pl. LVI, fig. 1.　×1

Carapace quadrate, front grooved with almost straight edges. Chelipeds massive, hand smooth.

Carapace reddish in colour near anterior margin, bluish-gray posteriorly; chelipeds reddish, fingers white; ambulatory legs bluish-gray. Lives on land near sea shore; very common in Japan.

Paramithrax edwardsii (*Ortmann*)

" Kosima-gani "

Pl. LVI, fig. 2.　×1

Carapace hairless, provided with spines on the margins and surface. Chelipeds rather slender, merus and carpus provided with pointed tubercles above, hand smooth. Ambulatory legs slender, dactylus slightly curved.

Carapace greenish-gray in colour, covered with brownish spots. Lives in Southern Japan.

Latreillia valida (*de Haan*)

" Sanada-mizuhiki-gani "

Pl. LVI, fig. 3.　×1

Carapace pear-shaped in outline, frontal region much narrowed, with two rounded processes on the antero-lateral margins.

Carapace brownish, mottled with black, legs variegated with red and yellow. Common along the coasts of Japan.

Charybdis sexdentata (*Herbst*)

" Isi-gani "

Pl. LVI, fig. 4.　×1

This figure shows a fresh specimen which is referable to the same species as the alcoholic one represented in Pl. LV, fig. 2. Mostly bluish-gray above, yellowish below, movable finger of the chelipeds is of a mahogany colour on dorsal surface.

Scylla serrata (*Forskâl*)

" Nokogiri-gazami "

Pl. LVI, fig. 5.　×1

Carapace moderately convex, four-toothed anterior and nine-toothed antero-lateral borders depressed, surface smooth. Chelipeds massive, with three spines on inner border of merus, two spines on dorsal distal border of wrist. Attains to a large size, with dimension of carapace more than 150 mm.

Inhabits Southern Japan, especially abundant in Formosa. Extensively cultured in Southern Formosa. Very tasty.

Portunus trituberculatus (*Miers*)

" Gazami " or " Watari-gani "

Pl. LVI, fig. 6　×½

Carapace rhomboid in outline, front with four spines, three pointed tubercles present near the centre. Trigonal merus of the chelipeds armed with four spines on inner border.

Carapace and legs dark purplish-gray above, whitish below, white mottlings observable on dorsal surfaces of carapace, chelipeds, and fifth legs. Fingers of chelipeds mahogany in colour. Common along the coasts of Japan. Burrows in sandy bottoms during daytime, swims near surface of the sea in schools at night. Widely consumed as food; very tasty.

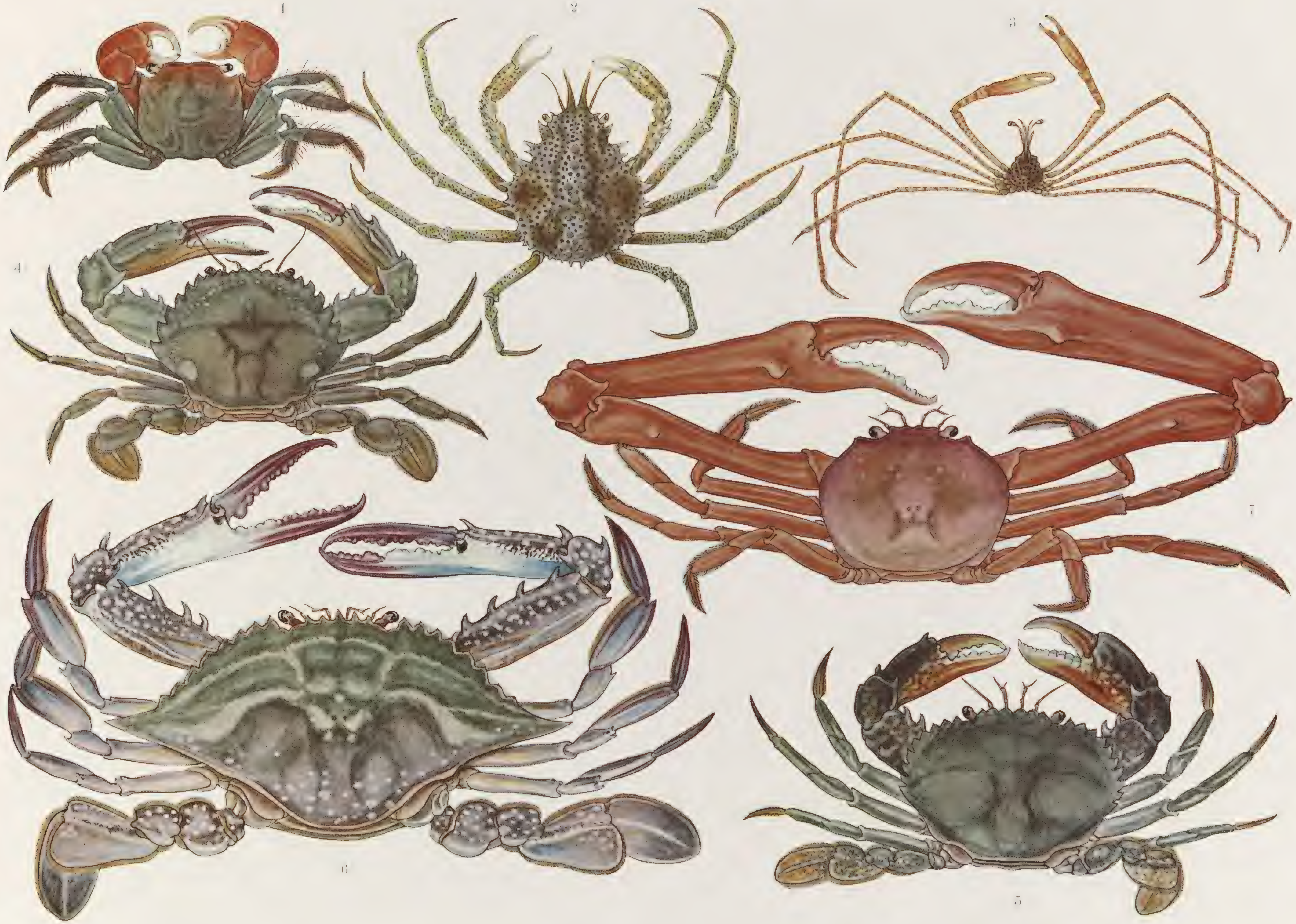
Carcinoplax longimanus (*de Haan*)

" Enkô-gani "

Pl. LVI, fig. 7　×1

Carapace and legs smooth, almost hairless except last three joints of sparsely pubescent ambulatory legs. Chelipeds three and half times as long as the width of carapace, a prominent tubercle on inner surface of palm and dorsal border of merus.

Lives in Southern Japan.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ケスヂヤドカリ

Pagurus arrosor (*Herbst*)

（第五十七圖版　第一圖）　×1

頭胸部背甲は中等度に扁平化し,前緣及び前側緣に近く剛毛束あり.眼柄は平たく,末部に至るに從ひその幅大となれり.第一觸角柄よりも短く,第二觸角柄よりは長し.鉗脚及び歩脚には短き剛毛が波狀又は鱗狀の條に沿ひて生じ,尚,歩脚の末端近くには剛毛束あり.

色は赤く,剛毛はやゝ褐色なり.南日本に產す.

アカホシヤドカリ

Pagurus diogenes *Fabricius*

（第五十七圖版　第二圖）　×1

頭胸部背甲は扁平化し,鰓域に亘るその最大幅は正中線にて測れる長さの十分の七に當る.前緣及び前側緣の近くには剛毛束あり.眼柄は平く,末部に至るに從ひ幅廣くなり,頭胸部背甲の前緣よりも短く,第二觸角柄よりも長く,第一觸角柄よりは短し.鉗脚及び歩脚は棘及び剛毛束にて密に蔽はれ,特に最後の三節の伸面上に於て然りとす.左鉗脚の腕節及び掌部の上內緣には齒狀の强大なる棘を有す.歩脚は扁平にして,左側のものは左鉗脚より長し.右側の歩脚は更に長し.

頭胸部背甲は赤く,濃赤點が頭胸部背甲及び脚に散在し,これ等の點はアルコホル漬標本となしたる後にも殘留すれども,甲羅の鰓域上に存する白點はアルコホルに投ずれば忽ち消失す.南日本に普通なり.

イシダタミヤドカリ

Pagurus setifer *Milne-Edward*

（第五十七圖版　第三圖）　×1

甲羅扁平化し,後端に至るに從ひ膨大す.眼柄は甲羅の前緣と殆ど同長にして第一觸角柄よりも僅に長し.第二觸角鞭毛の末半は,その各節の前內角突出す.鉗節及び歩脚は剛毛,黑頂棘にて密に蔽はるれども剛毛は棘及び表面の模樣を隱さず.左鉗脚の手部にては棘の基部を圍みて剛毛列生し,下緣上には棘の柵狀配列を見る.第三脚の最後の二節にも同樣なる齒狀又は隆起狀の彫刻を見る.此等の二節の外面には特異の彫刻あり.二節は幅廣く,縱に有棘隆起走り,その兩側の表面は窪み,甚だ規則正しき彫刻を以て,恰も敷石狀をなせり.

甲羅と脚とは赤く,濃赤色の橫紋が第一及び第二歩脚の外面を走る.南日本產.

エドワルヤドカリ

Diogenes edwardsii (*de Haan*)

（第五十七圖版　第四圖）　×1

眼柄は第一第二觸角柄より短し.可動額角は鋭尖にして全緣なり.左鉗脚は右脚よりも甚だ大なり.腕節は凸出し,手部は扁平にして平滑,光澤あり.二列の棘をその上緣に生じ一列の棘を下緣に有す.その前節は三角形にして中央を走る隆起を具へその上に棘が列生す.趾節は上面凹にして,三列の棘あり.

甲羅及び脚は青緑色,日本沿岸に普通なり.

マツクワンガニ

Birgus latro *Linnè*

（第五十七圖版　第五圖）　×$^1/_3$

甲羅はよく石灰化し,皺紋を有し,短き剛毛生ず;殆ど三角形にして,眼柄より短し.第一觸角柄はこれを伸せば鉗脚の趾節の基部に達す,鉗脚及び歩脚は棘及び剛毛を生ず.

臺灣,琉球南洋諸島に廣く分布し,陸棲なり.食用に供することを得.

タラバガニ

Paralithodes camschatica (*Tilesius*)

（第五十七圖版　第六圖）　×$^1/_4$

甲羅はその幅,長さよりも大なり.額角は三角狀にして單一なり.甲羅及び脚には棘ありて,この棘は若きときには比較的大なり.

甲羅及び脚は暗紫色を背面に呈し,腹面は淡黃色なり.カムチヤツカより朝鮮まで廣く分布し,輸出罐詰として最も重要なるものなり.

Pagurus arrosor (*Herbst*)

"Kesuzi-yadokari"

Pl. LVII, fig. 1　×1

Carapace moderately depressed, with tufts of bristles near the anterior and antero-lateral borders. Eyesialks depressed, broadened distally, shorter than the antennular but longer than antennal peduncles. Chelipeds and ambulatory legs thickly beset with shorter bristles which are arranged in undulationg or scaly lines and also loger bristles which form series of tufts towards the tip of the pereiopods.

Colour reddish, bristles brownish. Inhabits the Southern Japan.

Pagurus diogenes *Fabricius*

"Akahosi-yadokari"

Pl. LVII, fig. 2　×1

Carapace little depressed, its greatest breadth across branchial region equal to about seventenths the length in the median line; with tufts of bristles in the proximity of anterior and antero-lateral borders. Eyestalks depressed, broadened distally, shorter than anterior border of carapace, longer than antennal but shorter than antennular peduncles. Chelipeds and ambulatory legs thickly beset with thorn-like spines and tufts of bristles, especially in the last three joints and on extensor surfaces; with stronger tooth-like spines along the upper inner border of carpus and of the palm of left cheliped. Ambulatory legs compressed, those of the left side reaching beyond cheliped of the same side; those of the right side even longer.

Carapace and legs carmine red in colour, the deep red spots scattered on the carapace and legs still visible in alcoholic specimens but white spots on the branchial region of the carapace soon disappears in this preserving medium. Common in Southern Japan.

Pagurus setifer *Milne-Edwards*

"Isidatami-yadokari"

Pl. LVII, fig. 3　×1

Carapace depressed, broadened posteriorly. Eyestalks quite as long as the anterior border of the carapace and slightly longer than the antennular peduncles. Joints of the distal half of the antennal flagellum with the antero-internal angle produced. Chelipeds and legs beset with bristles and black-tipped thorn-like spines, but the bristles do not hide the spines and surface sculpture. In the hand of the left cheliped the bristles form little wreaths round the bases of the spines, and along the lower border the spines are grouped in palisade fashion. The same sort of toothed or crenulated sculpture occurs along the edges of two last joints of the third left leg; and the form and sculpture of the outer surface of these two joints is characteristic: they are broadened and are longitudinally traversed by a spinose carina; the surface on either side of the carina is hollowed, and is very elegantly tesselated by a series of deep-cut and extremely regular transverse grooves.

Carapace and legs carmine red in colour, cross-bands of darker shades present on the outer surfaces of the first and second ambulatory legs. Occurs in Southern Japan.

Diogenes edwardsii (*de Haan*)

"Edwar'-yadokari"

Pl. LVII, fig. 4　×1

Eyestalks shorter than antennular and antennal peduncles. Movable rostrum acte, entire. Left cheliped much larger than the right; carpus convex; hand depressed, smooth, glossy, with biserial spines on the upper margin and uniserial spines on the lower; immovoble finger triangular, with a series of spines on a crest running in the middle; movable finger concave above, with three series of spines.

Carapace and legs bluish-green in colour. Common along the coasts of Japan.

Birgus latro *Linnê*

"Makkwan-gani" or "Yasi-gani"

Pl. LVII, fig. 5　×$^1/_3$

Carapace strongly calcified, rugose, beset with short bristles. Rostrum almost triangular, shorter than the eyestalks. Antennular peduncles, when stretched, reach beyond the base of the movable fingers of the chelipeds. Chelipeds and ambulatory legs furnished with spines and bristles.

Widely distributed in Formosa, Ryûkyû, and South Sea Islands. Terrestrial in habit. Edible.

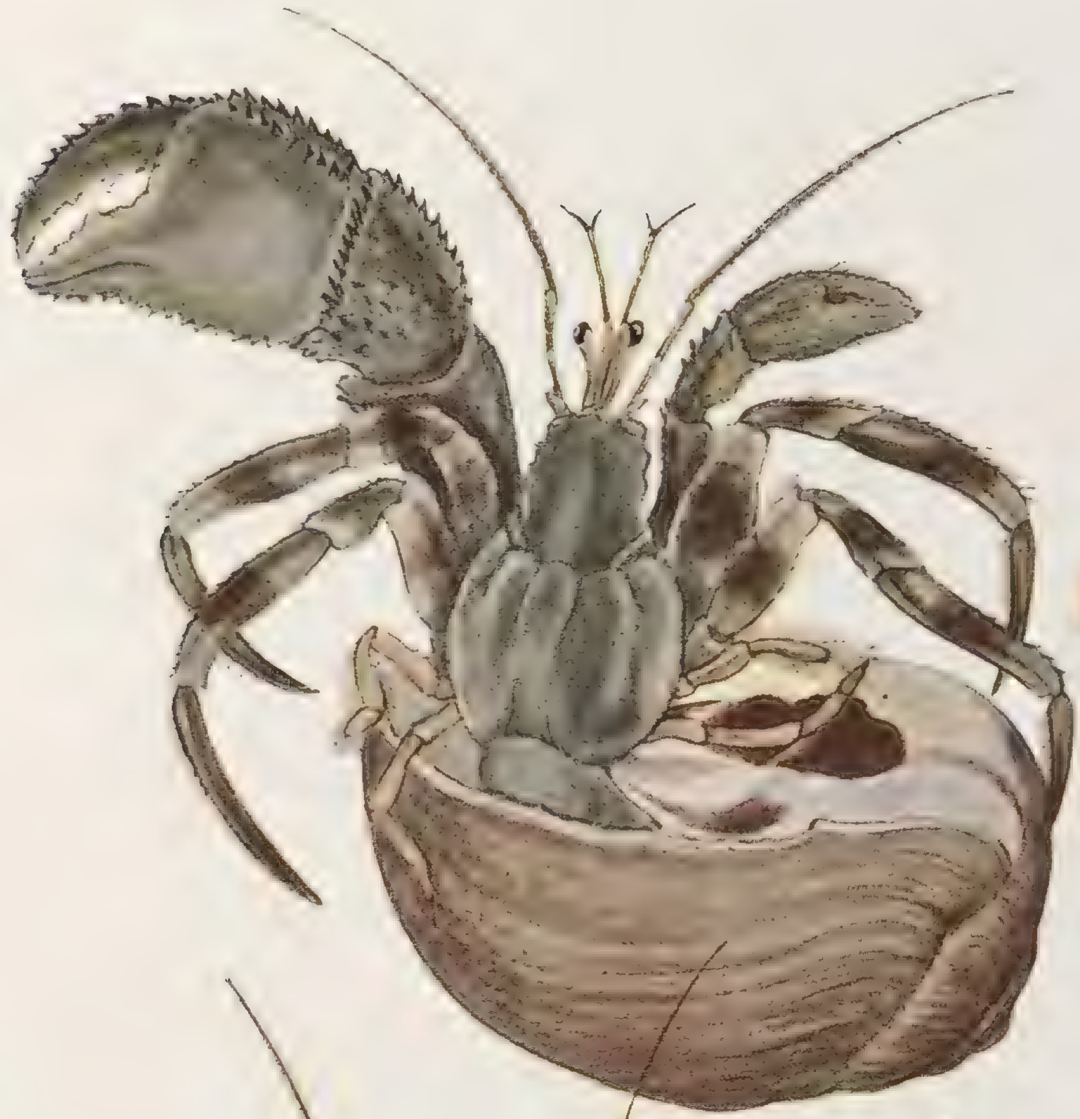
Paralithodes camschatica (*Tilesius*)

"Taraba-gani"

Pl. LVII, fig. 6　×$^1/_4$

Carapace broader than long, produced in a single, triangular rostrum. Carapace and legs beset with spines which are comparatively longer and sharper in young specimens.

Carapace and legs dark purplish on dorsal surfaces, faintly yellowish on ventral surfaces. Widely distributed from Kamtschatca to Chôsen. Most important canned food.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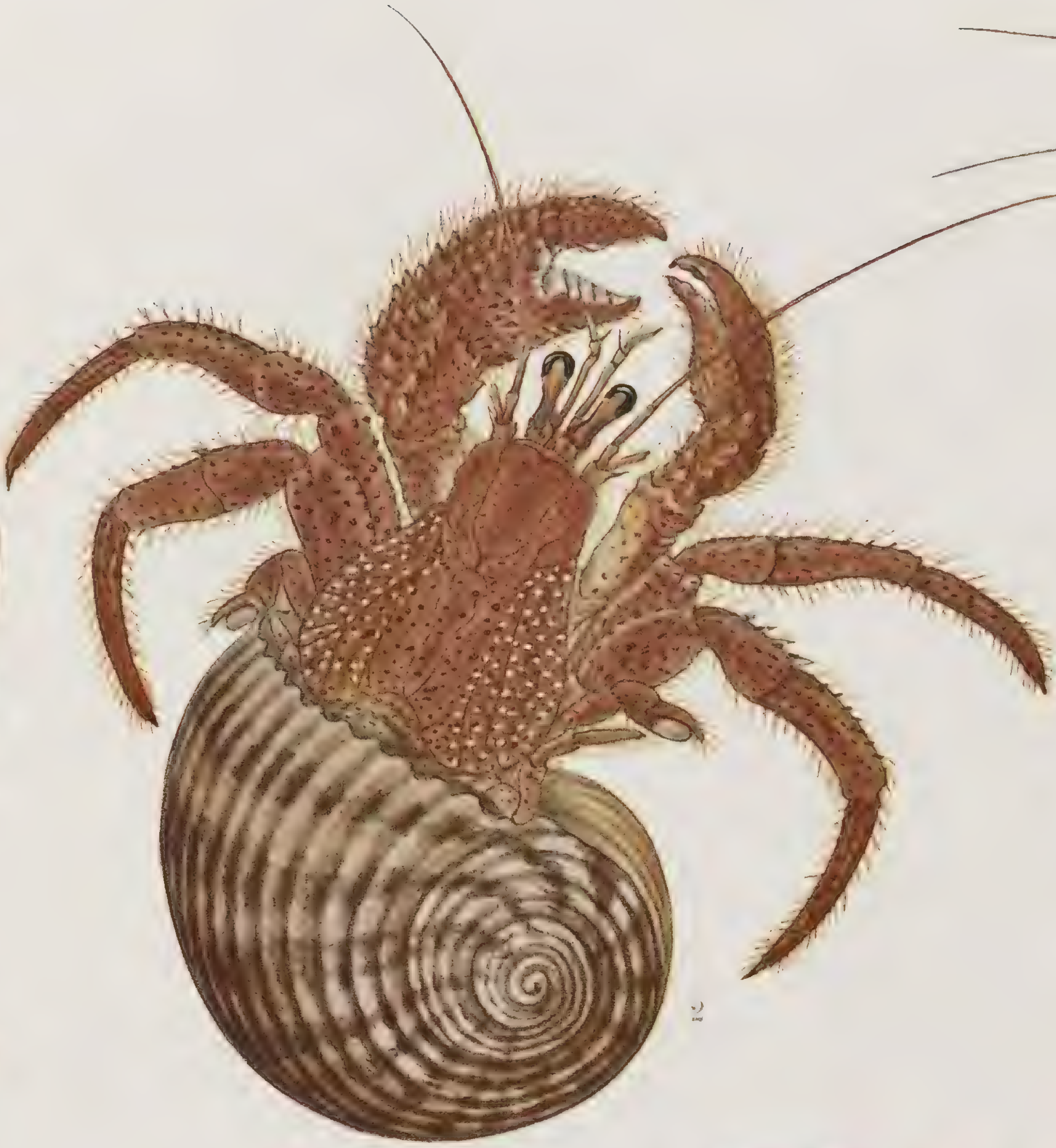
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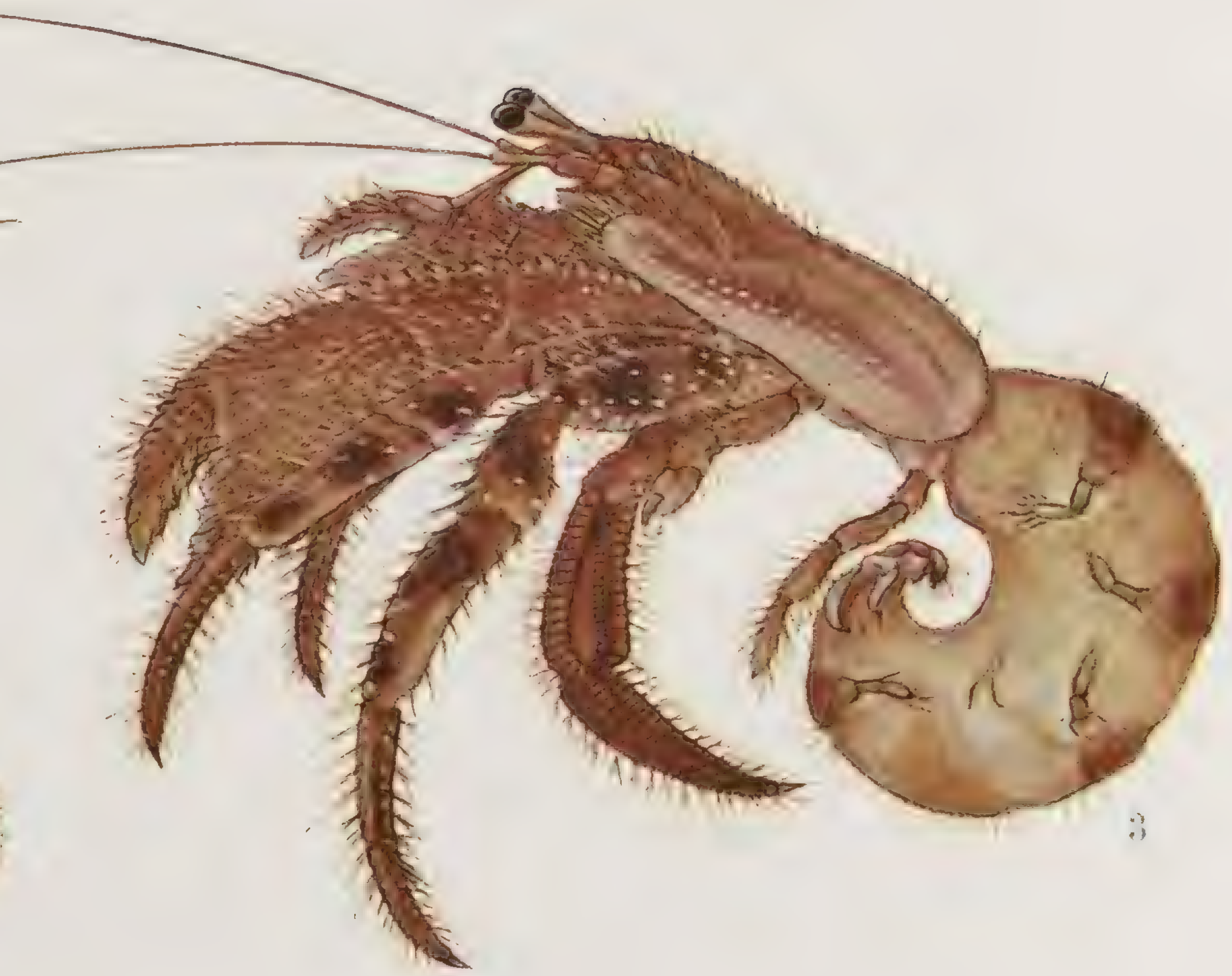
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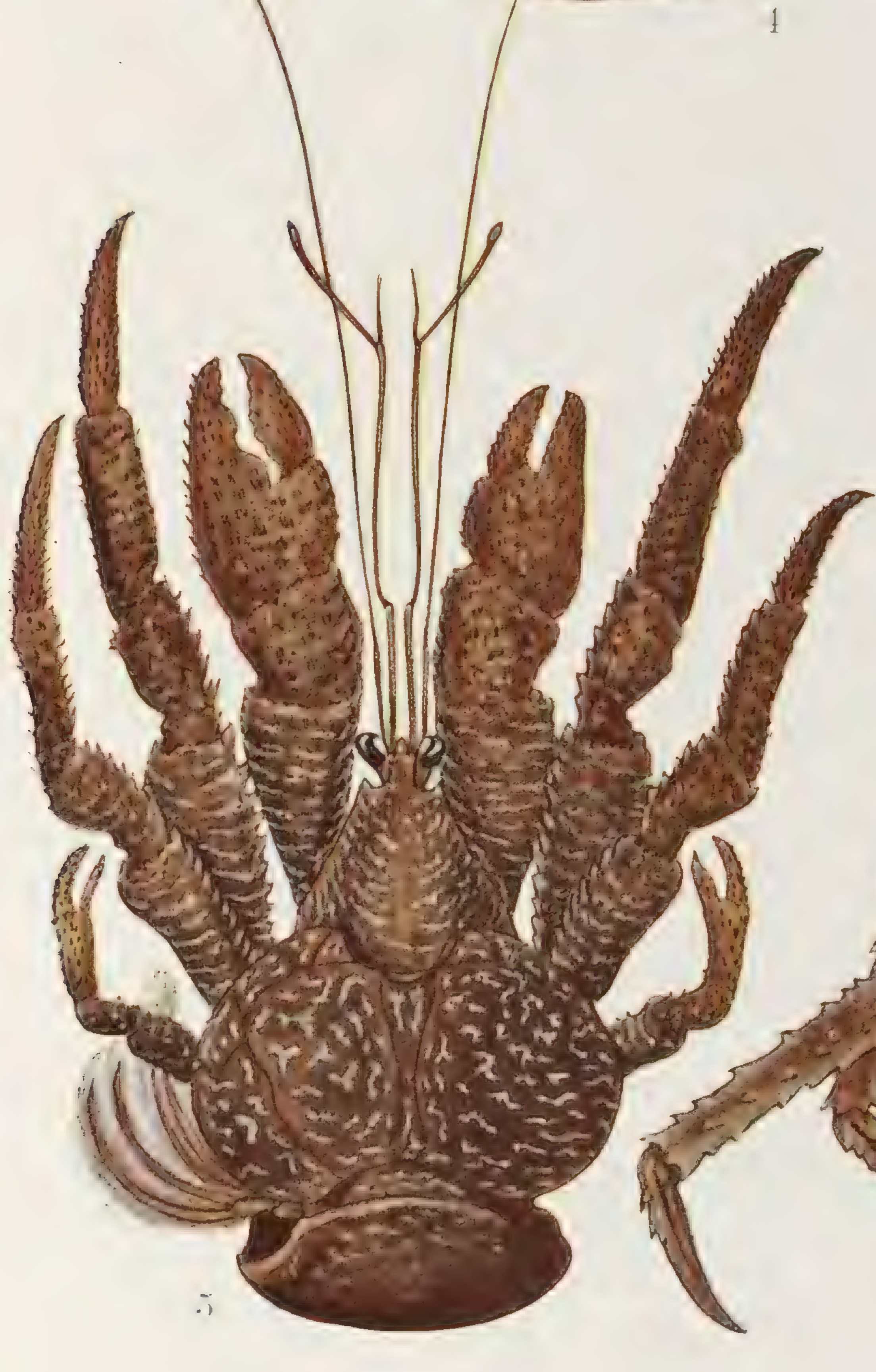
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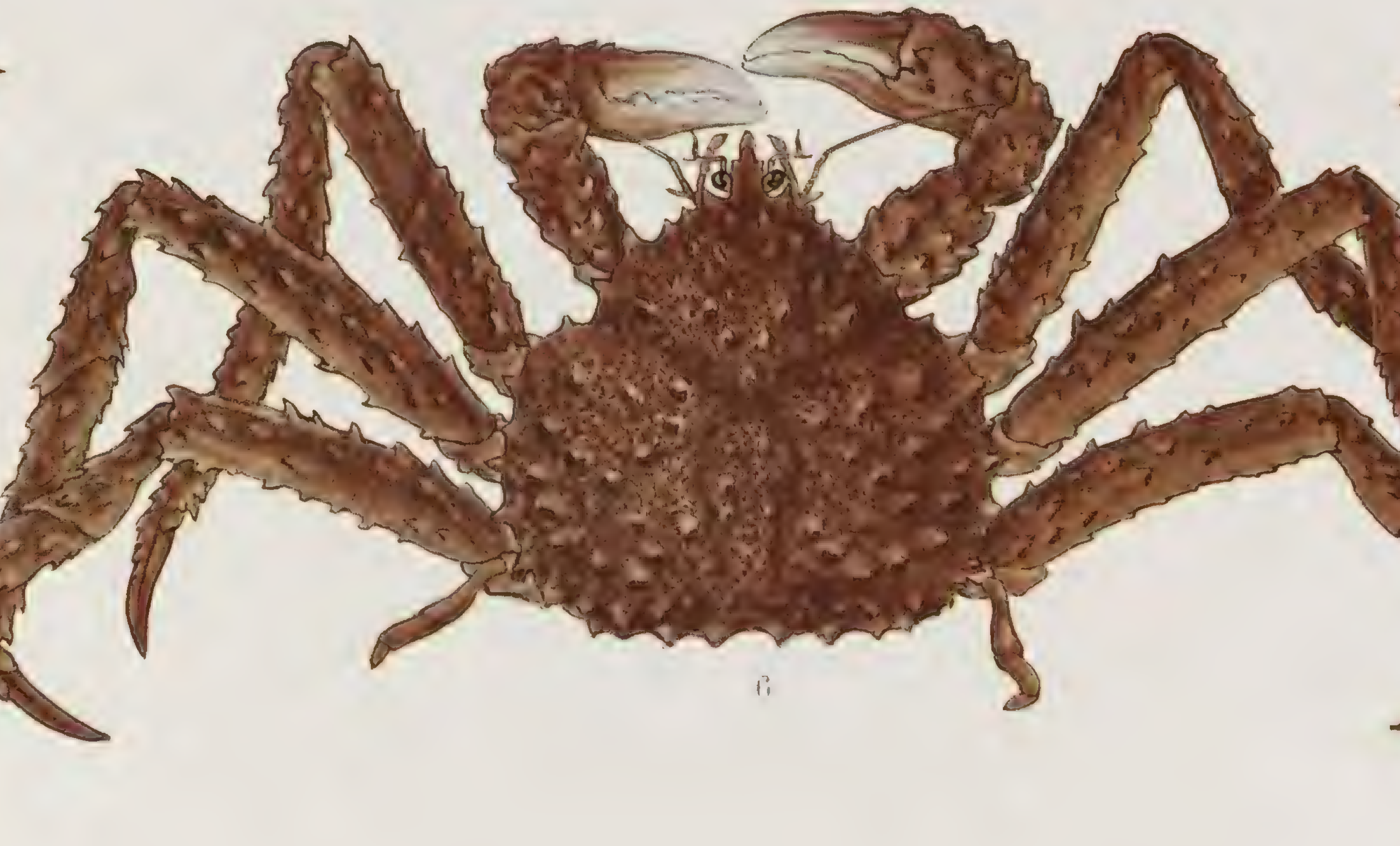
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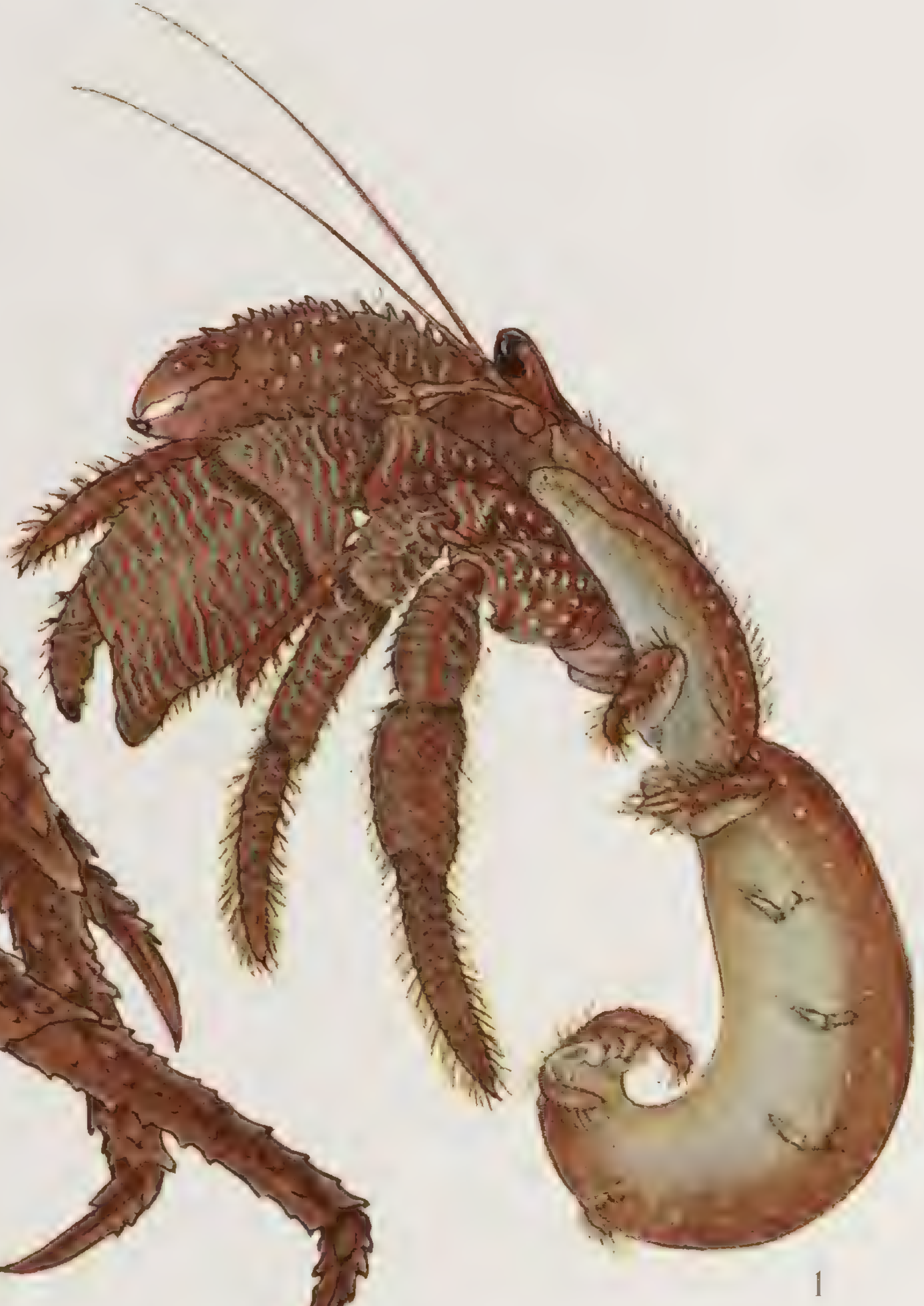
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NATIONAL MUSEUM

ハコエビ

Linuparus trigonus (*de Haan*)

（第五十八圖版　第一圖）　×2/5

頭胸部背甲はその後半，三稜を有す．腹節は背面正中線に隆起あり．第二觸角柄は扁平なり．頭胸部背甲及び腹節背甲は密に瘤體を以て被覆せらる．南日本の泥質海底に棲む．

セミエビ

Scyllarus haani *v. Siebold*

（第五十八圖版　第二圖）　×1

頭胸部背甲は粗面にして，密に瘤體を以て蔽はる．正中線を走る隆起を頭胸部背甲及び腹節背甲に認むることを得．第一及び第二の腹節側甲には棘をその前緣及び後緣に生ず．第三乃至第六腹節側甲には後緣にのみ棘を有す．日本の太平洋沿岸に產す．

ウチハエビ

Ibacus ciliatus *de Haan*

（第五十八圖版　第三圖）　×1

頭胸部背甲は扁平にして，前方に至るに從ひ幅廣くなれり．前緣には八齒，前側緣には三齒，後側緣には十三齒を具ふ．頭胸部背甲及び腹節背甲はその緣に密毛を生じ正中線には低き隆起あり．

淡赤色なり．日本の太平洋沿岸に產す．

ザリガニ

Cambaroides japonicus (*de Haan*)

（第五十八圖版　第四圖）　×1

頭胸部背甲はやゝ圓柱狀にして，三角形の額角は第一觸角柄よりも長く第二觸角柄第二節の基部を超ゆ．第一の大鉗脚の掌部には內緣に近く淺き溝あり．尾節は尾脚よりも短きことなし．

褐色又は綠色を帶ぶ．北海道及び青森縣の湖沼河川に產す．

アカザ

Nephrops japonicus *Tapparone Caneri*

（第五十八圖版　第五圖）　×1/2

頭胸部背甲及び腹節背甲は强固に石灰化し，獨特の彫刻あり．額角は銳尖にして長く，その側面にそれぞれ二棘を具ふ．第一鉗脚は殆ど體長と同長にして隆起を具へ且つ棘をその上に生ず．趾部は殆ど眞直にして，掌部よりも短し．尾脚の外肢はその末端に近く，橫走關接あり

甲羅及び脚の浮彫は赤色なり．南日本產．

Linuparus trigonus (*de Haan*)

"Hako-ebi"

Pl. LVIII, fig. 1.　$\times ^2/_5$

Carapace trigonal posteriorly, with prominent median and lateral ridges. Abdominal segments keeled above. Antennal flagella depressed.

Carapace and abdominal terga thickly beset with tubercles. Lives on muddy bottoms along the coasts of Southern Japan.

Scyllarus haani *v. Siebold*

"Semi-ebi"

Pl. LVIII, fig. 2　×1

Carapace and abdoninal segments rough on the dorsal surfaces, compactly beset with tubercles. Median ridge present in carapace and abdonimal terga. First and second abdominal pleura furnished with spines on their anterior and posterior borders. Third to sixth abdominal pleura with spines on the posterior border only.

Occurs along the Pacific coast of Japan.

Ibacus ciliatus *de Haan*

"Utiwa-ebi"

Pl. LVIII, fig. 3　×1

Carapace depressed, broadened anteriorly with 8 teeth on anterior, 3 teeth on antero-lateral, and 13 teeth on postero-lateral border. Carapace and abdominal terga thickly beset with bristles on their margins, provided with low median ridge.

Faintly reddish in colour. Lives along the Pacific coast of Japan.

Cambaroides japonicus (*de Haan*)

"Zari-gani"

Pl. LVIII, fig. 4　×1

Carapace subcylindrical, with triangular rostrum reaching beyond antennular peduncles and beyond the base of second joint of antennal peduncle. Palm of first large chelipeds provided with a shallow dorsal groove near the inner border. Telson never shorter than uropods.

Brownish or greenish in colour. Occurs in rivers and lakes from Hokkaidô to Aomori.

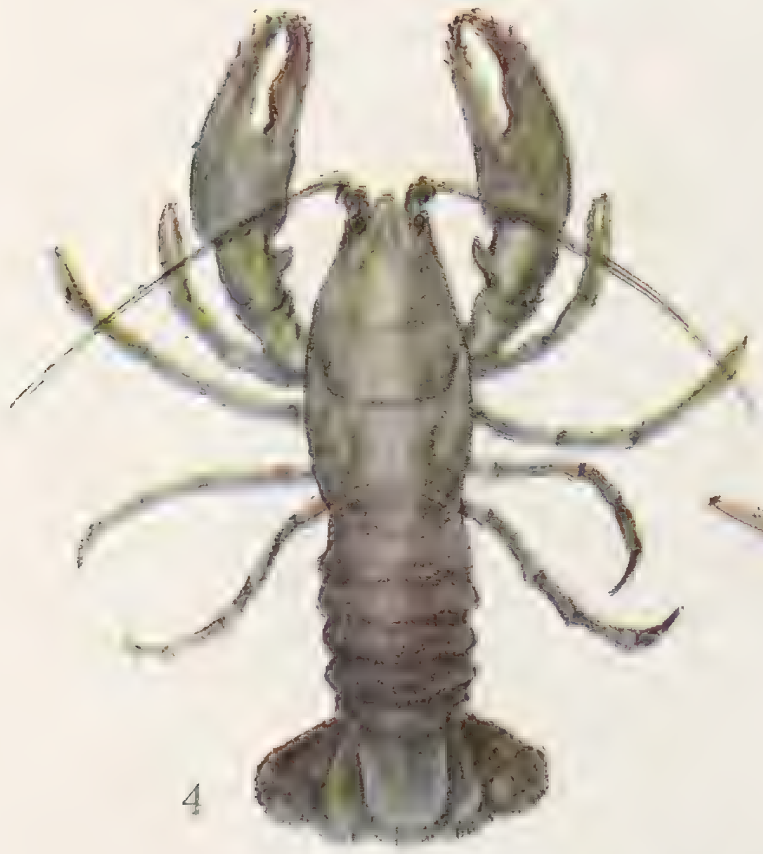
Nephrops japonicus *Tapparone Caneri*

"Akaza"

Pl. LVIII, fig. 5　$\times ^1/_2$

Carapace and abdominal terga strongly calcified, characteristically sculptured. Rostrum acute, long, provided with 2 spines on each lateral surface. First chelipeds nearly as long as the body, provided with spinose ridges, movable and immovable fingers almost straight, shorter than the palm. Exopodites of the uropods transversely articulated near the distal margin.

Relief sculptures of the shell and legs red in colour. Inhabits Southern Japan.



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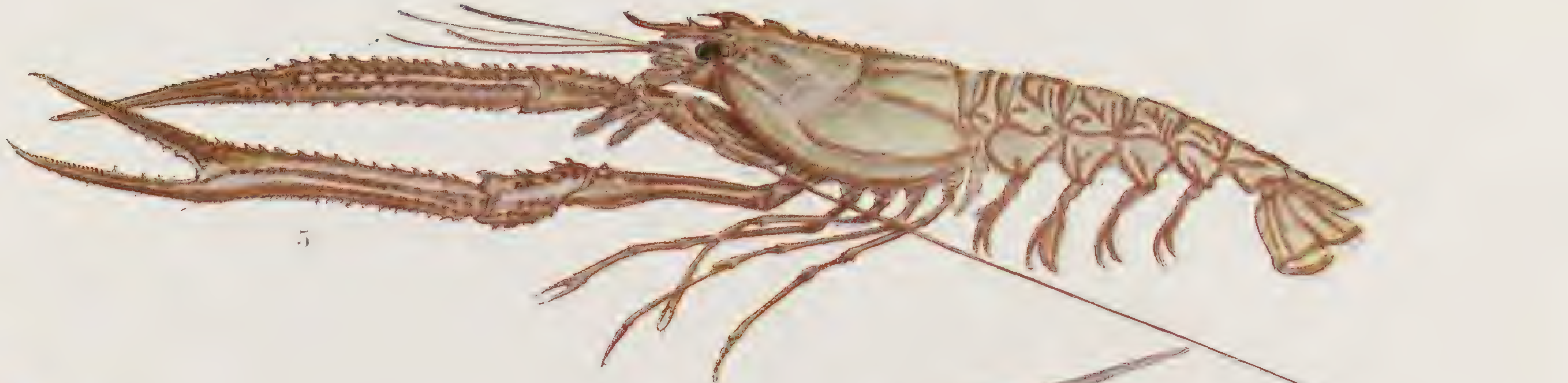

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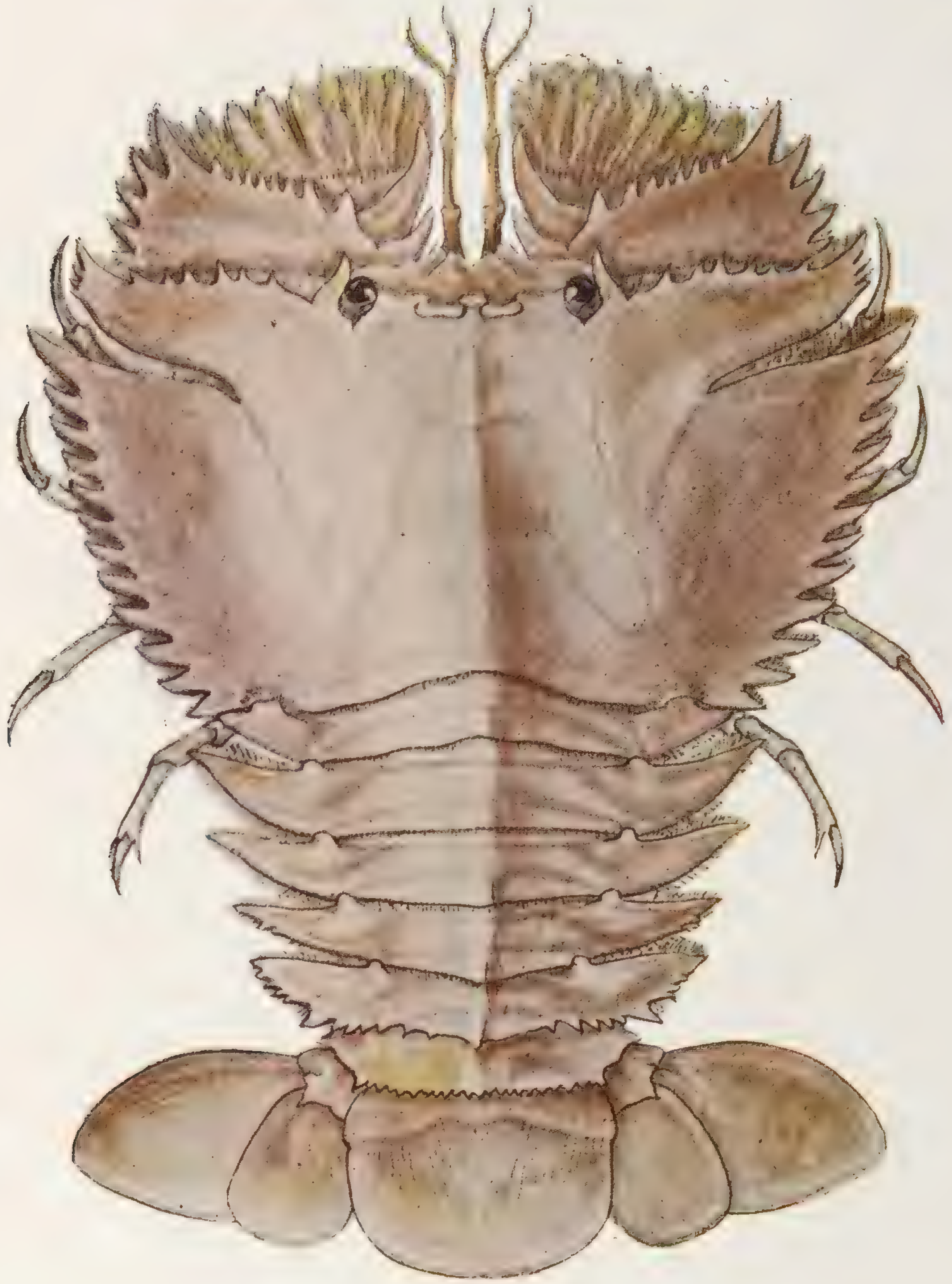

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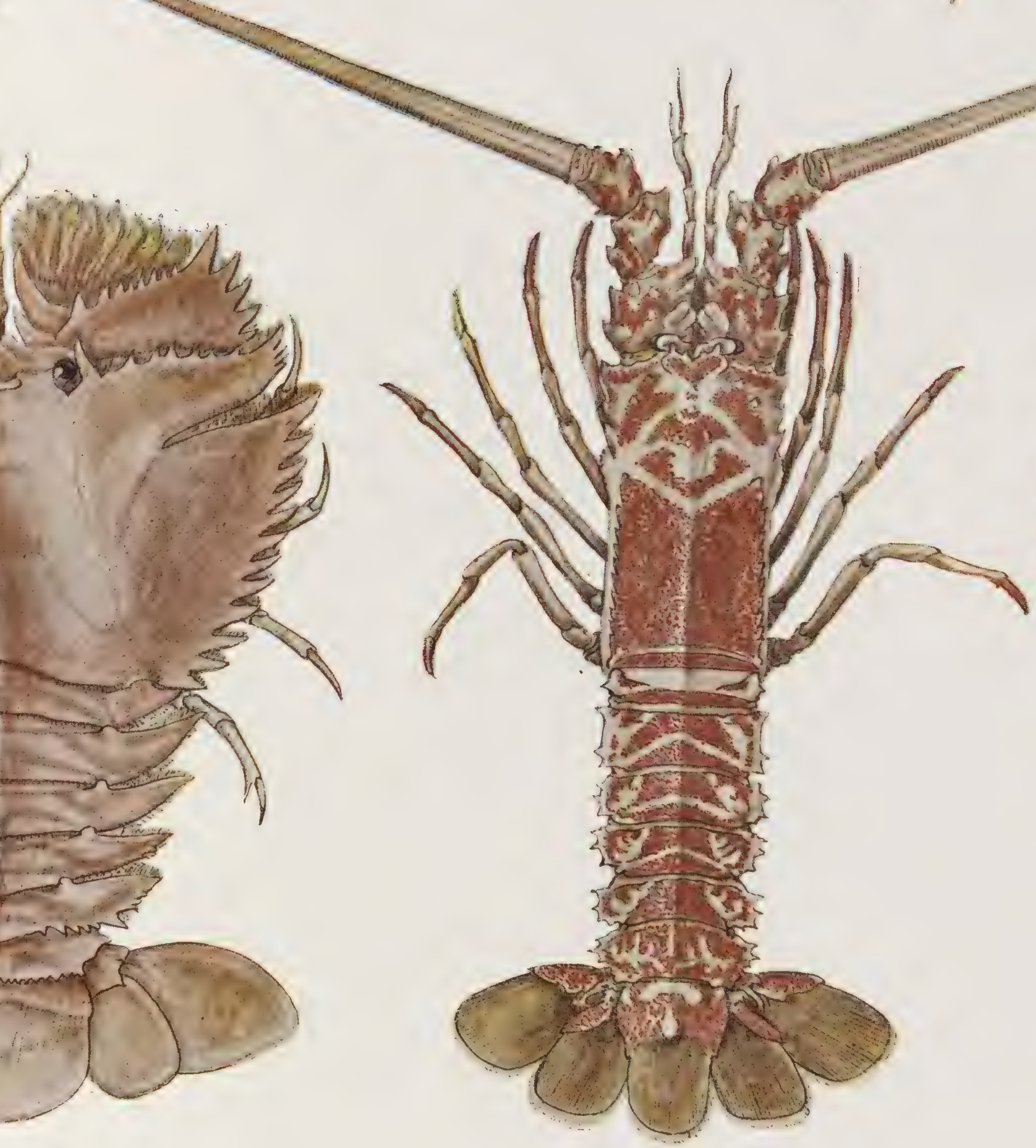

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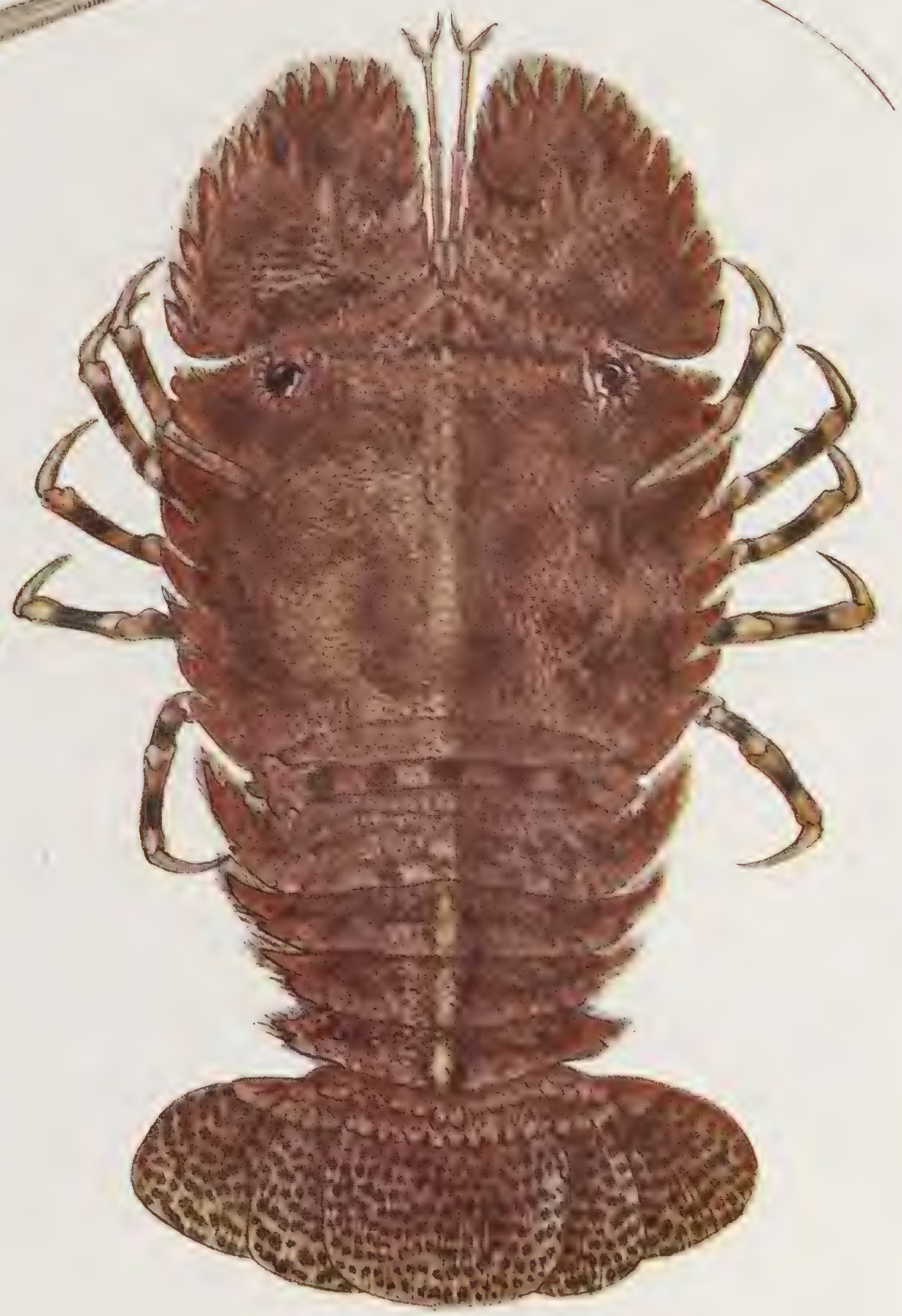


2

VICTORIA

Symphasiphaea imperialis Terao

"[illegible]"

Pl. LIX, fig. 5. [illegible]

Body smooth, glossy, scarlet red in colour. Carapace strongly carinated above, with several ridges on lateral surfaces. Abdomen markedly [illegible] along dorsal median line. Lives in deep [illegible] Prov. Sagami. First discovered by H.I.M. [illegible] in 1919 when he was Prince Regent; [illegible] specific name. His specimen was stranded on the morrow of a stormy night on sea-shore near the Imperial villa at Numazu, Prov. Suruga.

Macrobrachium nipponense (de Haan)

"Tenaga-ebi"

Pl. LIX, fig. 1. [illegible]

[illegible] delicious.

Panulirus [illegible]

[illegible]

Symphasiphaea imperialis Terao

[illegible]

Macrobrachium nipponense (de Haan)

[illegible]

テナガエビ

Macrobrachium nipponense (*de Haan*)

（第五十九圖版　第一圖）　×1

額角は十二乃至十五歯を上面に，三乃至四歯を下面に生ず．第二鉗脚は他の脚よりも著しく長く，先端尖れる瘤體を以て蔽はれ，蹠節は長節よりも長く，前節よりも短し．

灰綠色なり．海岸に近き河川，湖沼に棲み，本州より臺灣に至るまで廣く分布す．美味なり．

モモイロエビ

Pandalus hypsinotus *Brandt*

（第五十九圖版　第二圖）　×1

頭胸部背甲は顯著なる隆起を背面に有し，可動棘をその上に生ず，額角の下面には不可動棘あり．

罐詰又は乾燥して食用に供す．

イセエビ

Panulirus japonicus (*v. Siebold*)

（第五十九圖版　第三圖）　×1

頭胸部背甲は多數の棘を生じ，その中前方の二棘は最大なり．第二觸角鞭毛は體長よりも長し．腹節背甲上の横走溝はその前緣に密毛を生ず．脚の趾節には剛毛束あり．岩質海底に棲み，日本太平洋沿岸に產す．食品として貴重なり．暗褐色を呈せり．

サクラエビ

Sergestes kishinouyei *Gordon et Terao*

（第五十九圖版　第四圖）　×1

體は半透明にして，多數の赤色點を以て蔽はれ，體表及び附肢上に多數の發光器あり．夏期に產卵して死亡す．駿河灣に多產し，乾製品として本邦內にて食用に供せられ，又支那へ輸出す．

シヤウジヤウエビ

Sympasiphaea imperialis *Terao*

（第五十九圖版　第五圖）　×$^{1}/_{10}$

體は平滑にして光澤あり．その色猩々緋なり．頭胸部背甲は上面に顯著なる隆起あり．側面には數個の隆起を有す．腹部は著しき隆起を背面正中線に示す．駿河灣の深部に棲む．本種は畏くも　天皇陛下が攝政宮殿下におはせし大正七年に，御發見になりしものにして，種名はこれに因めり．陛下の御採集遊ばされたる標本は暴風雨ありし翌朝，沼津御用邸附近の海岸に打ち揚げられしものなり．

Macrobrachium nipponense (*de Haan*)

"Tenaga-ebi"

Pl. LIX, fig. 1　×1

Rostrum with 12 to 15 teeth above, 3 to 4 teeth below. Second chelipeds much longer than the other legs, covered with pointed tubercles, carpus longer than merus but shorter than propodus.

Grayish-green in colour. Inhabits rivers and lakes located near sea-shores; widely distributed from Main Island to Formosa. Delicious.

Pandalus hypsinotus *Brandt*

"Momoiro-ebi"

Pl. LIX, fig. 2　×1

Carapace prominently keeled above, with movable spines, lower border of rostrum armed with immovable spines.

Consumed as canned or dried foods.

Panulirus japonicus (*v. Siebold*)

"Ise-ebi"

Pl. LIX, fig. 3.　×1

Carapace armed with many spines, anterior ones much stronger than the others. Antennal flagella longer than the body Transverse grooves on the abdominal terga pubescent on anterior margins. Dactylus of legs provided with tufts of bristles. Lives on rocky bottoms of the sea; widely distributed along the Pacific coast of southern Japan. Valuable as food. Dark maroon in colour.

Sergestes kishinouyei *Gordon et Terao*

"Sakura-ebi"

Pl. LIX, fig. 4.　×1

Body translucent, covered with numerous red spots, with a great number of luminous organs on body and appendages. Spawns and dies off in summer. Very abundant in Suruga Bay; consumed as dried food in Japan and also exported to China.

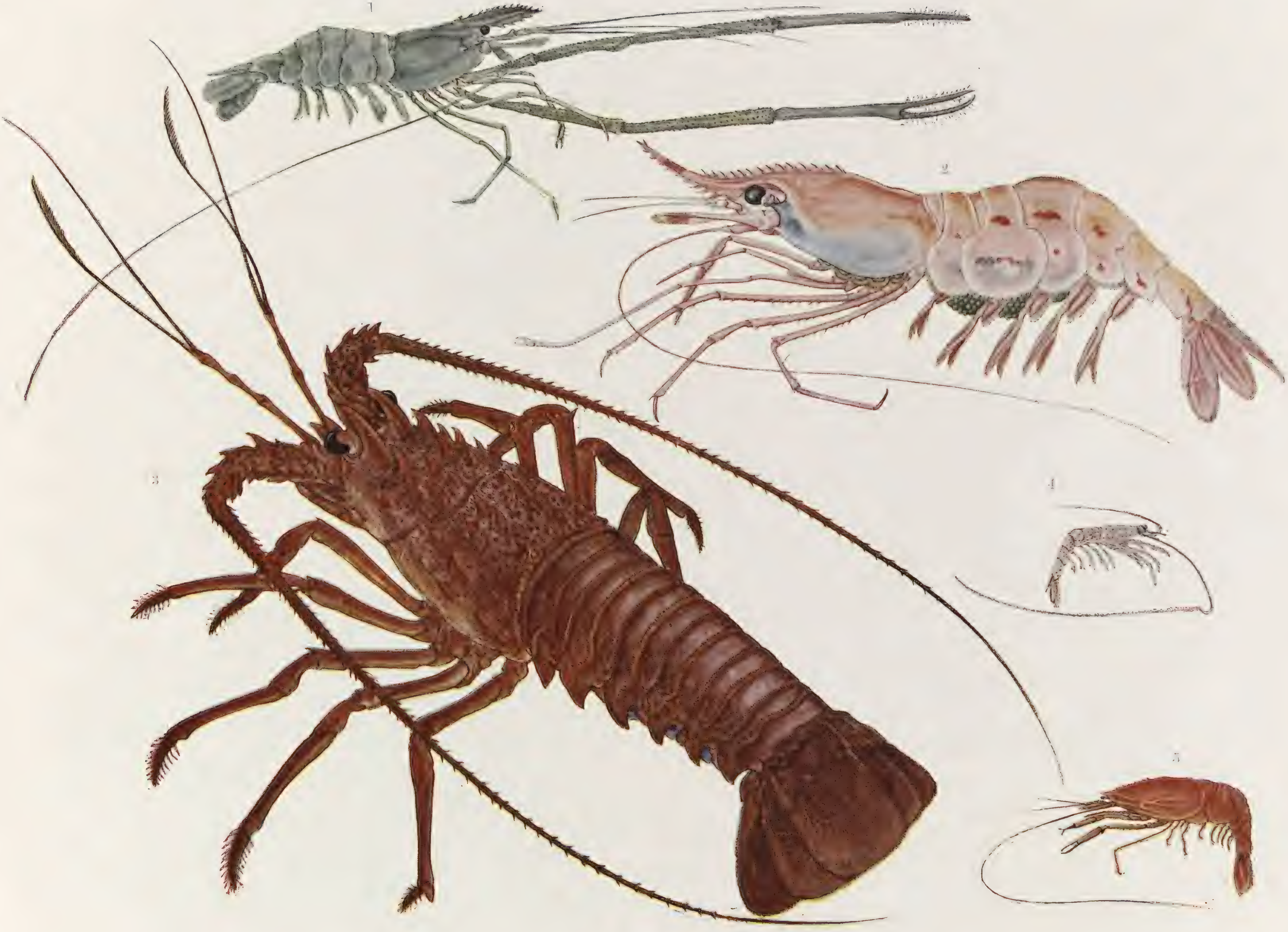
Sympasiphaea imperialis *Terao*

"Syôzyô-ebi"

Pl. LIX, fig. 5.　×$^{1}/_{10}$

Body smooth, glossy, scarlet red in colour. Carapace strongly carinated above, with several ridges on lateral surfaces. Abdomen markedly keeled along dorsal median line. Lives in deep sea off Prov. Suruga. First discovered by H.I.M. the Emperor in 1918 when he was Prince Regent; hence the specific name. His specimen was stranded on the morrow of a stormy night on sea-shore near the Imperial villa at Numadu, Prov. Suruga.

第五十九圖版 PL. LIX



クルマエビ

Penaeus japonicus (*Bate*)

（第六十圖版　第一圖）　×1

甲羅は平滑にして厚く堅し．額角は少しく上方に曲り，八乃至九，稀に十個の歯を上緣に，一個の歯を下緣に有す．頭胸部背甲は正中線に溝ありて，これに平行する溝とその幅同じ．貯精嚢は左右の兩瓣合してポツケツト狀をなす．精包には翼狀附屬物あり．雄交接器は單に縱に折りたゝまれ，外緣は厚く，內瓣は薄くその前端に屈曲せる突起あり．甲羅は淡褐色又は淡灰色にして濃色の橫紋約十一條あり．天麩羅材料中最も美味なり．やゝ淺き海の砂底に棲む．日本の太平洋沿岸に廣く分布す．

フトミゾエビ

Penæus latisulcatus *Kishinouye*

（第六十圖版　第二圖）　×1

クルマエビに酷似すれども，甲羅に橫紋なきを以て容易に區別することを得．額角は餘り上向せず，上緣には十乃至十一個の歯を具ふ．頭胸部背甲の正中溝は，その側方を走る溝よりも幅狹し．貯精嚢の中瓣は先端二叉し，石灰化せる附屬物をこゝに有し，左右瓣の內緣は互に接近して，縱走細隙狀の開口をなす．精包は狹き纖維質の帶狀附屬物を有す．雄交接器の內辧は外瓣を超えず．

生けるものゝ色は褐色又は灰色を帶ぶ．南日本產．やゝ稀なり．

クマエビ

Penaeus semisulcatus *de Haan*

（第六十圖版　第三圖）　×1

甲羅はやゝ厚く平滑なり．額角は上向し，上緣に七個下緣に三個の歯を有す．頭胸部背甲正中線を走る有溝隆起は殆ど末緣に達す．側溝の長さはこの隆起の半分なり．第一觸角鞭毛はその柄よりも短し．胸脚は細長く，第一對は基節及び坐節に1棘を具ふれども，第二對は基節に1棘を有するのみ．雄交接器は外瓣の前緣に細かき歯を生ず．內瓣はその後端，短直突起に終る．貯精嚢はフトミゾエビのものに似たれども，中瓣に石灰化せる附屬物を缺く．

灰褐色又はやゝ靑色にして，濃淡の條紋交互に橫走す．附肢は大抵赤し．

南日本產．

ウシエビ

Penaeus carinatus *Dana*

（第六十圖版　第四圖）　×1

甲羅は平滑にして光澤あり．額角は上向し，頭胸部背甲の約三分の二の長さあり，上緣には七乃至八歯，下緣には三歯を有す．背部正中隆起は後部に至るに從ひ低く不明瞭となり，頭胸部背甲の後緣に達せず．この隆起上には不明瞭なる溝を見ることあり．この隆起に平行せる溝は胃歯附近にて終る．第一觸角は鞭毛と柄と同長なり．貯精嚢の中瓣及び左右瓣は相合して Y 字形をなす．雄交接器の外瓣は屈曲し，先端銳く，前緣に近く細かき歯あり．

暗褐色又は稀にやゝ黑色にして，濃淡の橫紋あり．南日本產，特に臺灣に多し．

シバエビ

Penaeus joyneri (*Miers*)

（第六十圖版　第五圖）　×1

甲羅は薄く，柔くして不規則に有毛溝あり．額角は甚だ僅に上向し，その先端近くには歯なく，この無歯部は眼と長さほゞ等し．これより後の約四分の三の部分は，上緣に七個の棘あり．第一乃至第三對の胸脚第二節には1棘を具ふ．雄にては第三胸脚第二節の棘は第二節それ自身よりも長く，その先端に尖れる突起物を冠る．第四第五の胸脚第四節には瘤體あり．貯精嚢の左右瓶は厚く，凸出し，その內瓣は中瓣の全長に沿ひて走る．雄交接器の外瓣は前端やゝ膨大し，內瓣は長く曲れる突起に終る第一腹節側甲は切れ込みあり．特に雄に於て著し．

淡灰色にして，無數の綠點散布す．約20米の淺海の砂底に生活し，南日本の太平洋沿岸に廣く分布す．經濟上最も重要なる蝦の一なり．

ヨシエビ

Penaeopsis monoceros (*Fabricius*)

（第六十圖版　第六圖）　×1

甲羅は皺紋を有し，密毛を生ず．額角は雄にては殆ど眞直なれども雌にては少しく上向す．雌雄ともにその上緣に八歯を具ふ．第一胸脚には2棘，第二，第三にはそれぞれ1棘あり．雌にては第四胸脚の第一節膨大し，雄にては第五胸脚の第四節は1棘を具ふ．貯精膨の內瓣末端は膨大し，外瓣の末端を殆んど被覆せり．腹節は上緣隆起し，特に第四乃至末節に於て著し．

我體は淡赤又そ淡褐色なれども未成熟のものにては灰色を帶ぶ．南日本に廣く分布し，太平洋及び日本海沿岸に廣く分布す．

サルエビ

Trachypenaeus curvirostris (*Stimpson*)

（第六十圖版　第七圖）　×1

甲羅は厚く毛を以て蔽はる．額角は雄にては短くして眞直なれども，雌にては觸角柄と同長にして上向す．雌雄ともにこゝに八歯を具ふ．貯精嚢の中瓣は窪み菱形なり．左右瓣は短小にして中央にて合す．雄交接器の外瓣はその末端がやゝ突出せる內瓣に對し直角に屈曲してT字形をなす．

淡褐又は灰褐色なり．青森より九州に至る太平洋沿岸に廣く分布す．

Penaeus japonicus (*Bate*)

"Kuruma-ebi"

Pl. LX, fig. 1.　×1

Shell smooth, thick and hard. Rostrum slightly curved upwards, with 8 or 9, rarely 10, teeth on the upper margin but only one tooth on the lower. Median groove on the dorsal surface of the carapace nearly equal in breadth to the lateral grooves on the same surface. Lateral plates of the thelycum united in the median line in the form of a pocket. Spermatophore provided with a wing-shaped appendage. Petasma simply folded longitudinally, outer rims thick, inner lamina thin with a soft crooked protuberance at each anterior end. Shell either faintly brownish or grayish in colour, about eleven bands of it darker in tints. Most delicious among the fried lobsters. Widely distributed along the coasts of Japan.

Penaeus latisulcatus *Kishinouye*

"Hutomizo-ebi"

Pl. LX, fig. 2.　×1

Closely allied to *P. japonicus* but easily distinguished from it by the absence of the cross bands on the shell. Rostrum scarcely ascending, with 10 or 11 teeth on the upper margin. Median groove on the dorsal surface of the carapace narrower than the lateral grooves on the same surface. Central plate of the thelycum with a forked, calcified appendage at tip, inner margins of the lateral plates juxtaposed to form the slit-like longitudinal opening of the seminal receptacle. Spermatophore with a narrow, fibrous, band-like appendage. Petasma with the inner lamina not extending beyond the outer lamina anteriorly.

Penaeus semisulcatus *de Haan*

"Kuma-ebi"

Pl. LX, fig. 3.　×1

Shell rather thick and smooth. Rostrum ascending, with 7 teeth above and 3 teeth below. Carapace with canaliculated median carina extending almost to the posterior margin, lateral grooves running only half-way of the carina. First pair of antennae with the flagella shorter than the peduncles. Pereiopods slender, the first pair armed with a spine on both the basis and ischium but the second pair with one spine on the basis only. Petasma with very minute teeth on the anterior margin of the outer lamina, the inner lamina ending posteriorly in a short straight process. Thelycum resembles that of *P. latisulcatus* but lacks the calcified appendage to the median plate.

Penaeus carinatus *Dana*

"Usi-ebi"

Pl. LX, fig. 4.　×1

Shell smooth and glossy. Rostrum curved upwards, about two-thirds as long as the carapace, with 7 or 8 teeth on the upper margin and 3 teeth on the lower. Dorsal median carina of the carapace lower and less distinct posteriorly, not reaching to the posterior margin of the carapace, with or without a very faint groove on the carina. Lateral grooves running parallel to the dorsal median end near the level of the gastric tooth. First pair of antennae with the flagella as long as the peduncles. Central and lateral plates of the thelycum meet in three lines in the form of a Y. Outer rims of the petasma bent, pointed, with minute teeth near the anterior margin. Lives in Southern Japan, especially abundant in Formosa.

Penaeus joyneri (*Miers*)

"Siba-ebi"

Pl. LX, fig. 5.　×1

Shell thin, soft, irregularly set with setose grooves. Rostrum very slightly curved upwards, no tooth in apical portion which is nearly equal in length to corneal region of the eye, but 7 dorsal teeth in proximal three-fourths. Second joint of the first to third pairs of pereiopods provided with a spine. In males, the spine on the second joint of the third pereiopod longer than the second joint and capped with a pointed process, fourth joint of the fourth and fifth pereiopods provided with a tubercle. Lateral plates of the thelycum thickened, convex, their inner margins run along the entire length of the central plate. Outer lamina of the petasma a little swollen anteriorly, the inner lamina ends in a long, recurved process. First abdominal pleuron incised, especially markedly in males. Pale grayish in colour, beset with numerous small greenish spots. Inhabits sandy bottoms, about 20 metres deep.

Penaeopsis monoceros (*Fabricius*)

"Yosi-ebi"

Pl. LX, fig. 6.　×1

Shell rugose, and thickly setose. Rostrum nearly straight in males but a little bent upwards in females, with 8 teeth on the upper margin in both sexes. First pair of the pereiopods provided with two spines, second and third pairs with a single spine. In females the first joint of the fourth pair of the pereiopods expanded whereas in males the fourth joint of the fifth pereiopod is with a tooth. External margin of the lateral plates of the thelycum ridged. Distal end of the inner lamina of the petasma dilated, nearly covering the distal end of the outer lamina. Abdominal segments keeled above, especially distinctly from the fourth to the last. Light red or light brown in the adult but grayish in the immature specimens.

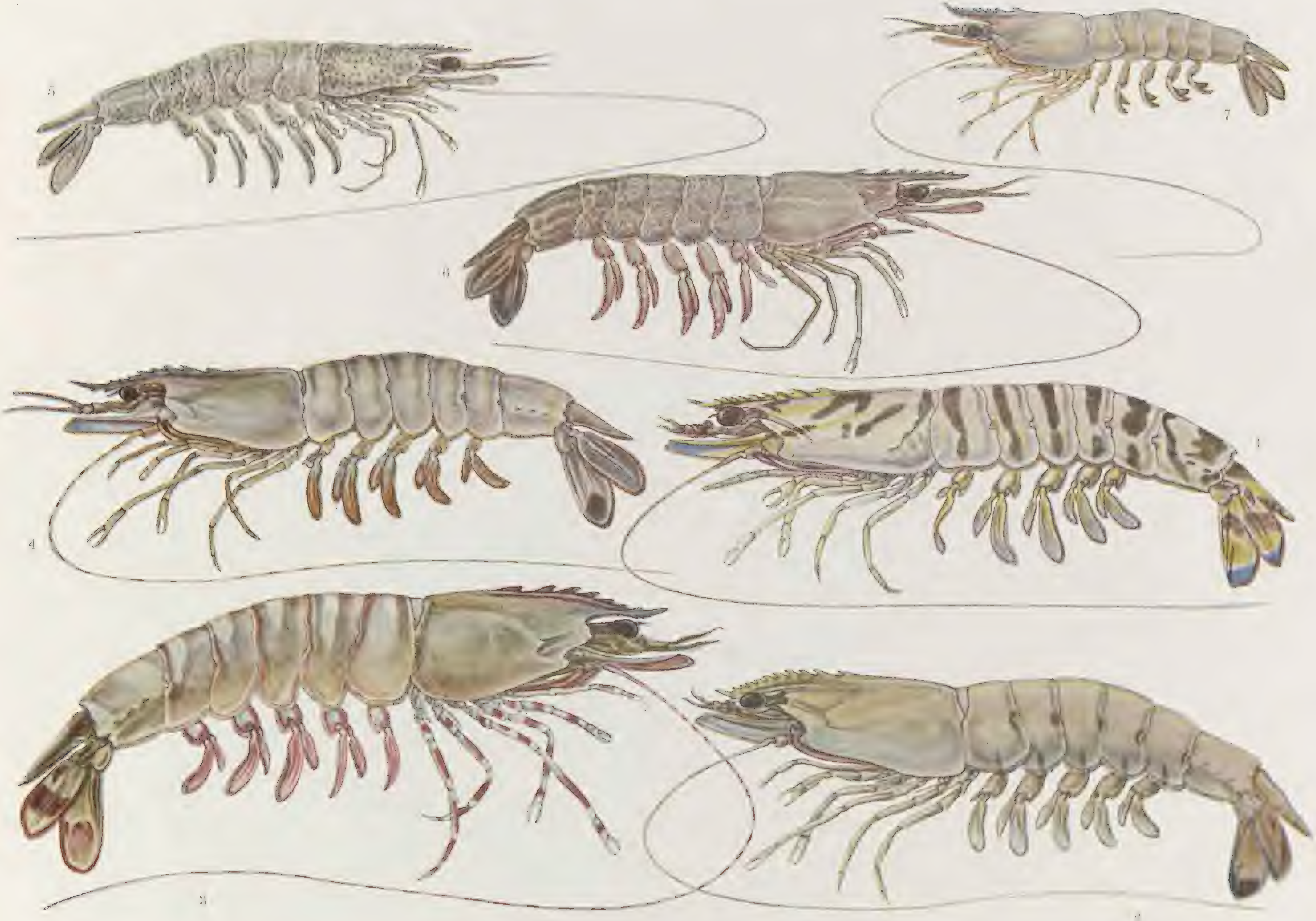
Trachypenaeus curvirostris (*Stimpson*)

"Saru-ebi"

Pl. LX. fig. 7　×1

Shell thick, covered with setae. Rostrum short and nearly straight in males, but extends as far as the first antennal peduncle and curved upwards in females, with 8 teeth on the upper margin in both sexes. Central plate of the thelycum concave, and lozenge-shaped; the lateral plates short and small, united in the median line. Outer lamina of the petasma produced distally at right angles to the inner slightly projecting lamina to make the shape of a T. Widely distributed along the Pacific coast from Aomori to Kyûsyû.

第六十圖版 PL. LX



エボシガヒ

Lepas anatifera *Linné*

（第六十一圖版　第一圖）　×1

背板は三角形にしてその尖端餘り突出せず．楯板と相接すれども峰板とは隔たる．柄部は長く裸出し往々にして頭狀部の五倍乃至六倍の長さに達す．

柄狀部は黒紫色，頭狀部の膜狀部は褐色を帶び，石灰板は白くその縁は橙赤色を呈す．日本沿岸に普通なり，

カメノテ

Mittella mittella (*Linné*)

（第六十一圖版　第二圖）　×1

柄狀部短く，頭狀部と同長なること稀なり．密に鱗を以て蔽はる．側板は二十四乃至二十六個にして頭狀部の基部を圍む．

頭狀部は黄灰色にして柄狀部は紫褐色なり．干滿潮線間の岩石上に着生す．日本にては甚だ普通にして，食用に供することもあり．

ツノカメノテ

Scalpellum stearnsii *Pilsbry*

（第六十一圖版　第三圖）　×1

柄狀部は甚だ扁平にして頭狀部と殆ど同長又は少しく長し，鱗は螺旋狀に排列せり．頭狀部には十四個の石灰板あり．

日本にては普通ならず．

シロスヂフヂツボ

Balanus amphitrita albicostatus *Darwin*

（第六十一圖版　第四圖）　×1

岩石又は船底上に甚だ普通にして，石灰板の色は暗赤色より暗灰紫色まで種々あり．白條縱走す

アカフヂツボ

Balanus tintinnabulum rosa *Pilsbry*

（第六十一圖版　第五圖）　×1

殼の色はバラ色の赤より黒紫色までいろいろ變化す．殼形は截頭圓錐形にして，その上縁は全縁又は鋸齒狀にして，表面に縱走隆起あり．岩石上又は船底上に着生し，日本に廣く分布す．

クロフヂツボ

Tetraclita squamosa japonica *Pilsbry*

（第六十一圖版　第六圖）　×1

干滿潮線間の岩石上に群をなして着生し，日本沿岸に廣く分布す．殼は暗紫色より深灰色まで變ず．四片に分たれ又は分たれず．

シヤコ

Squilla oratoria *de Haan*

（第六十一圖版　第七圖）　×1

日本產シヤコ中最も普通なる種類にして北海道より臺灣まで分布す．泥質の海底に棲む．第五乃至第七胸節には二側棘あるを以て他種と區別す．美味なり．

ガブトガニ

Tachypleus tridentatus *Leach*

（第六十一圖版　第八圖）　×1

頭胸部背甲の前縁は雄にては波狀なれども雌にては全縁なり．尾棘は雄にては雌に於けるよりも長し．胸脚は雌にては凡て鉗を有すれども，雄にては第二第三脚に鉗なし．南日本の淺海砂底に棲み特に瀨戸內海に多產す．時としては肥料に供せるゝことあり．

Lepas anatifera *Linné*

" Ebosi-gai "

Pl. LXI, fig. 1 ×1

Tergum triangular, not so much prominent at top, juxtaposed with scutum, but widely apart from carina. Peduncle long, naked, sometimes five or six times as long as capitulum.

Peduncle blackish-purple in colour, membraneous mantle brownish, capitular shells white with orange-red margins. Common along the coasts of Japan.

Mitella mitella *Linné*

" Kamenote "

Pl. LXI, fig. 2. ×1

Peduncle short, rarely as long as capitulum, covered with compactly set scales. Lateral plates 24 to 56 in number, encircle the base of capitulum.

Capitulum yellowish-gray in colour. peduncle dark purplish-brown. Lives on rocks between tide-marks. Very common in Japan; sometimes used as food.

Scalpellum stearnsii *Pilsbry*

" Tuno-kamenote "

Pl. LXI, fig. 3 ×1

Peduncle much flattened, nearly as long as or a little longer than capitulum, scales arranged in spiral series. Capitulum covered with fourteen white plates.

Not common in Japan.

Balanus amphitrita albicostatus *Darwin*

" Sirosuzi-huzitubo "

Pl. LXI, fig. 4 ×1

Very common on rocks, or on the bottoms of ships. Colour of the plates varies from dark red to dark grayish-purple, with white ridges running longitudinally.

Balanus tintinnabulum rosa *Pilsbry*

" Aka-huzitubo "

Pl. LXI, fig. 5 ×1

Colour of shell variable from rosy red to blackish-purple. Shell is of a truncated cone in shape, upper margin entire or serrate, surface with longitudinal ridges. Lives on rocks and bottoms of ships; widely distributed in Japan.

Tetraclita squamosa japonica *Pilsbry*

" Kuro-huzitubo "

Pl. LXI, fig. 6 ×1

Inhabits gregariously on rocks between the tide-marks; widely distributed along the coasts of Japan. Shell dark purplish-gray to deep gray in colour, either undivided or divided in four pieces.

Squilla oratoria *de Haan*

" Syako "

Pl. LXI, fig. 7 ×1

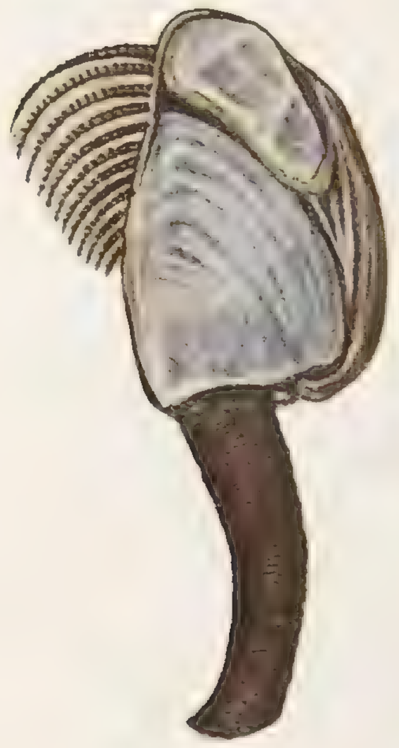
Most common and abundant among the stomatopods of Japan. Distributed from Hokkaidô to Formosa; inhabits muddy bottoms of the sea. Distinguished by two lateral teeth on the fifth to seventh thoracic segments. Delicious.

Tachypleus tridentatus *Leach*

" Kabuto-gani "

Pl. LXI, fig. 8 ×1/3

Anterior margin of carapace slightly wavy in males, entire in females. Tail spine longer in males than in females Thoracic legs chelate in all pairs in females, but non-chelate in second and third pairs in males. Inhabits sandy bottoms of Southern Japan, especially abundant in Island Sea. Sometimes used as manure.



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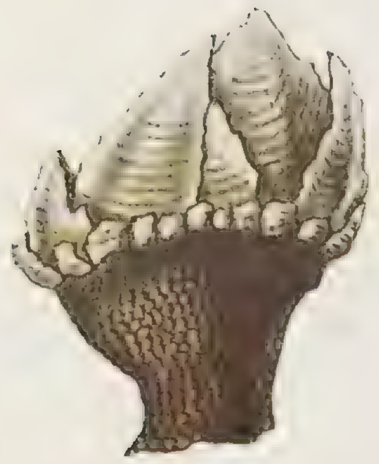

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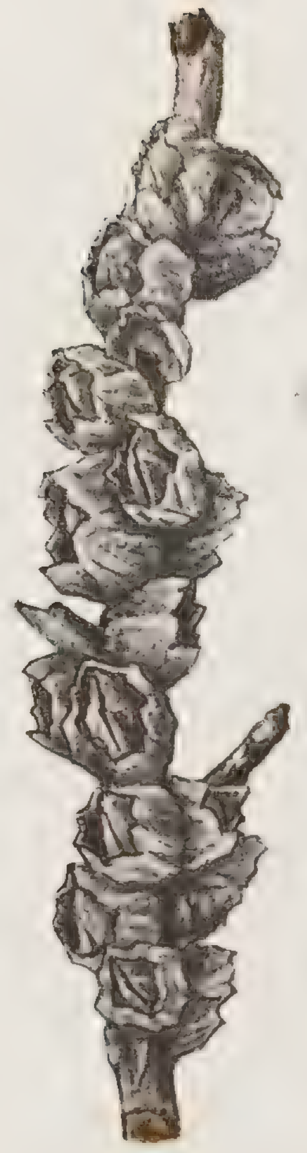

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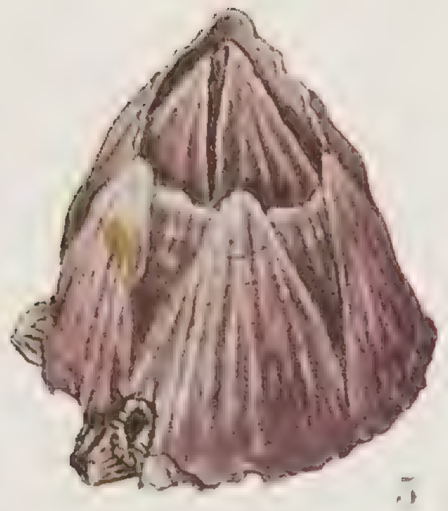

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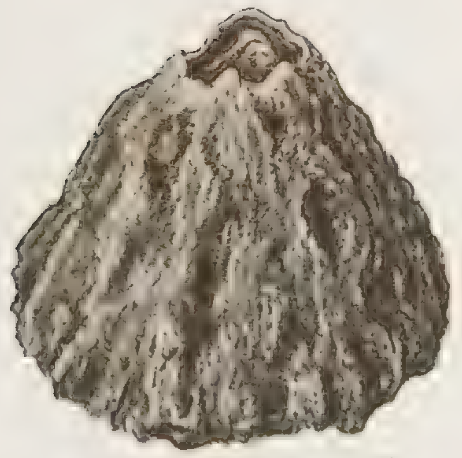

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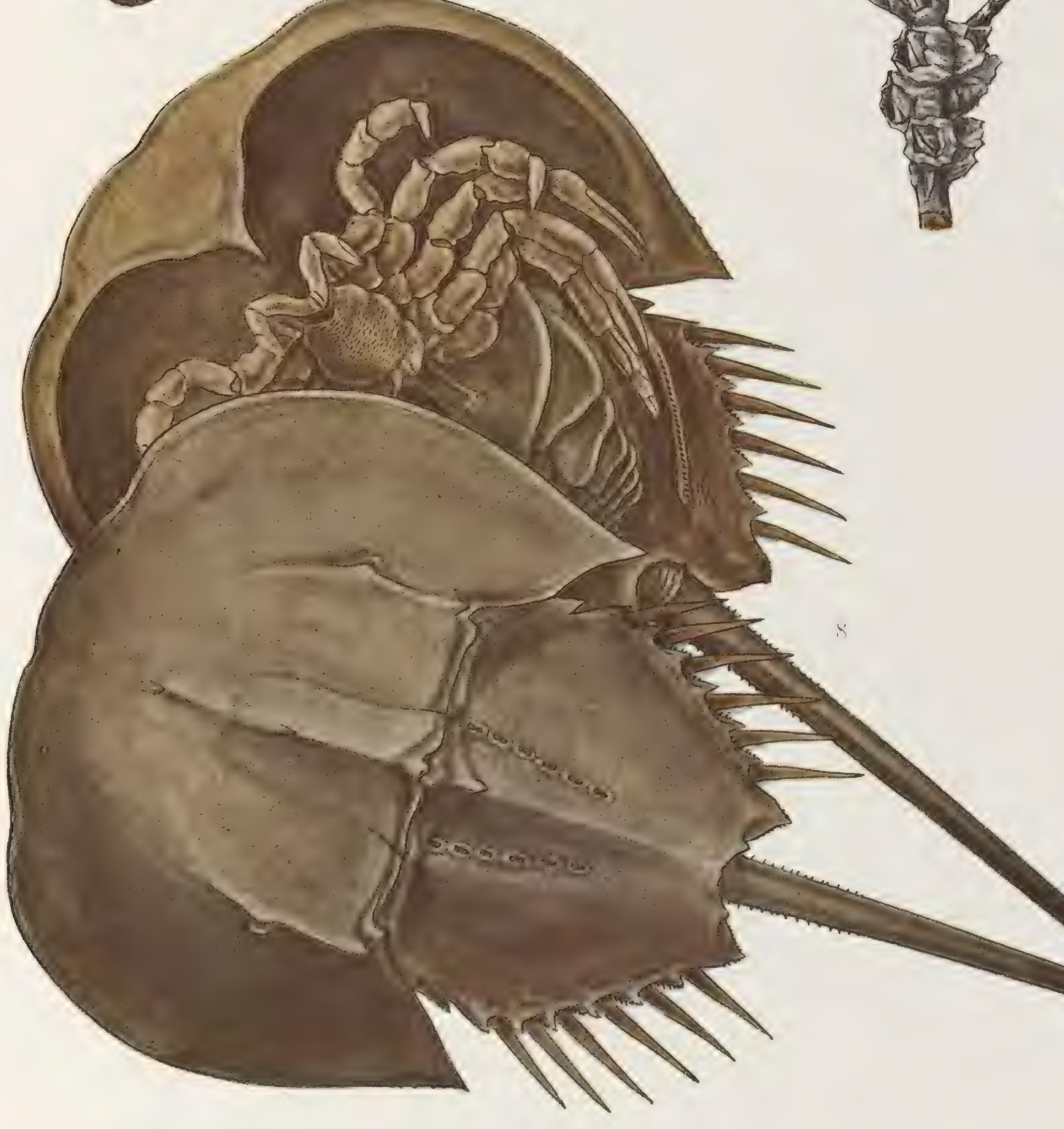

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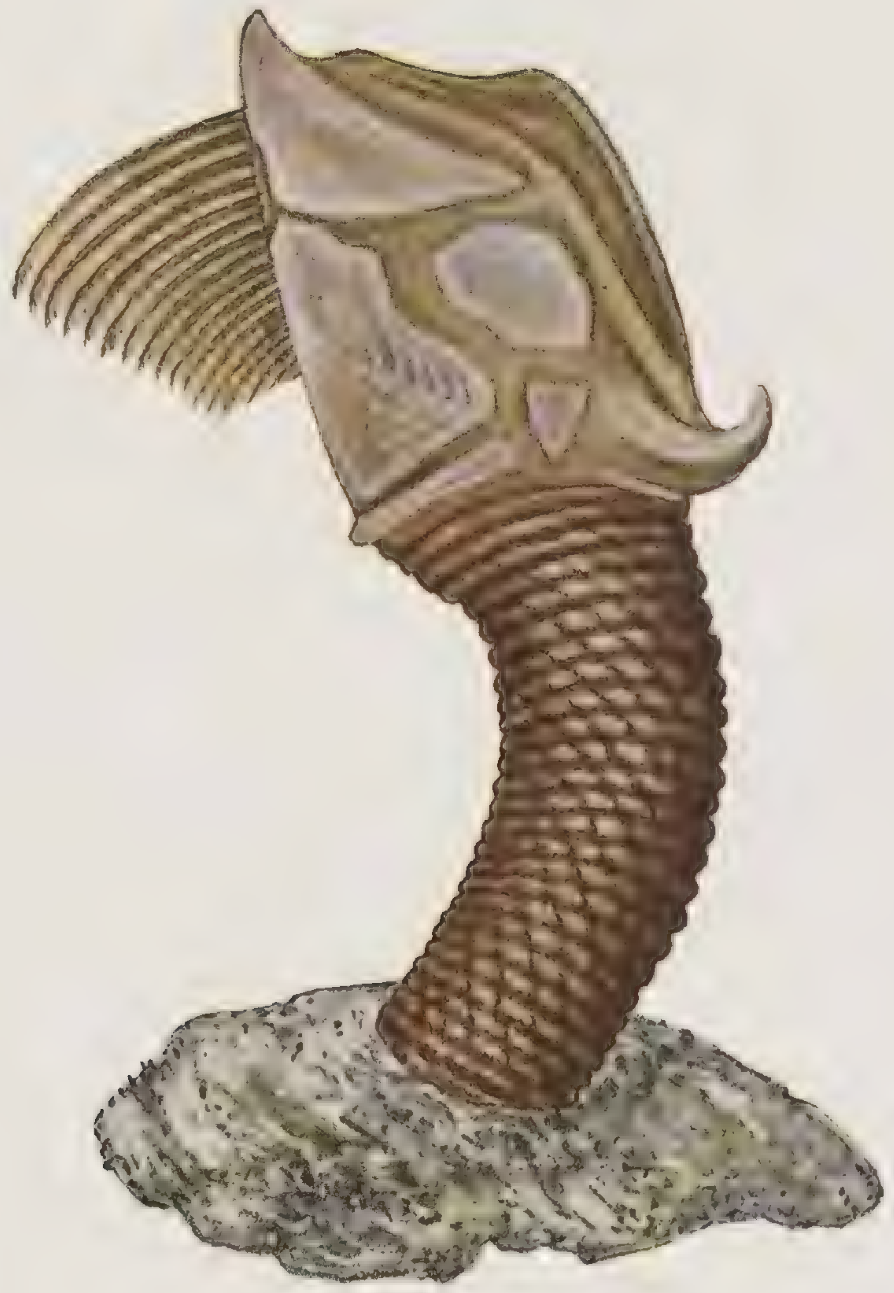
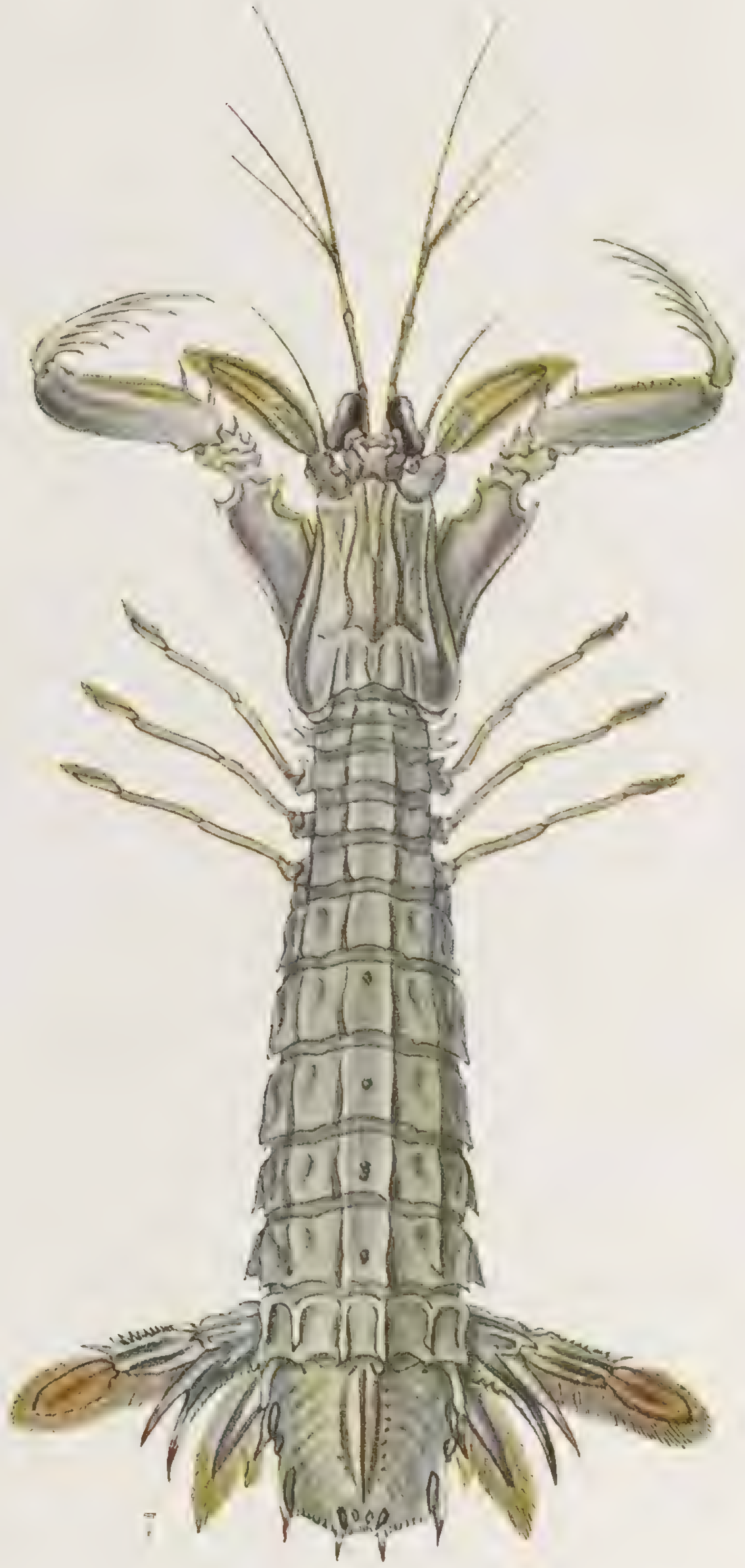


3



7

ミジンコ

Daphnia morseri var. japonica *Ishikawa*

(六十二圖版　第十一圖(雌) 第十二圖(雄) ×15)

體は透明にして極めて淡き褐色を備へ消化器官は食餌のため綠色を呈するこさ多し. 體長雌は 2–2.7 粍, 雄は 1–1.1 粍あり. 吻の後角は直角に近き角度をなし, 頭部は之を背面より見るさきは幅廣く側面より見れば眼の後背部に於て極めて僅に凹入し, 後緩やかに隆起し更に再び胸部背面の前端に於て少しく凹む. 棘の根基部は其腹緣稍々膨大す. 腹部背面にある 4 個の肉狀突起は第 1 のもの最も細長く第 2, 第 3 之に亞ぎ第 4 は單に痕跡を止むるのみ. 第一を除く外は皆其の表面に微細の毛を叢生す. 腹部の後方兩側に列生する鋸齒は 11 乃至 16 個を數ふ. 雄の前觸角は彎曲度小なり. 中部日本の池沼, 水溜等に分布す. 他の微小甲殼類こ共に昔より養魚上必要なるものこして知らる.

ノロ

Leptodora kindtii (*Focke*)

(第六十二圖版　第十三圖)　×15

體は頗る長く圓筒形をなし, 4 節よりなる. 殼は痕跡を止むるのみ, 頭部は長く眼は大なり. 眼點を有せず. 第一觸角は小にして頭部の腹面に附着し可動性なり. 第二觸角は强大にして游泳に適す. 肢は 6 對あり. 其第一對は他の 5 對に比し遙に長大なり. 體節の最後部は 1 對の尾爪に終り肛門は其間に開口す. 食道は甚だ長く腸は短くして最後體節中に在り. 無色透明, 體長 4 粍以上に達す. 晩春より夏に亘り大潮時の沖圏部に多く現はれ夜間活動す. 貪食性なり. 淡水魚族の天然餌料たり.

スイシヤウアミ

Euphausia pellucida *Dana*

(第六十二圖版　第十四圖)　×10

頭胸部皮殼兩側下緣には各 2 個の齒狀突起あり. 其の中前方のものは稍大なり. 腹部にては末節最も長く, 前觸角の根基第一節には上方に向ふ小形の葉狀突起を附屬し, 其の末部二分す. 後觸角の鱗片の根基腹方に存在する棘狀突起は甚だ大にして其の內緣には小なる鋸齒を列生す. 尾部は長く, 尾肢の內葉は外葉に比し長し. 體長 10 乃至 15 粍, 體色は無色透明, 我國近海にては太平洋岸, 日本海及び支那東海に產多す. クヂラ, カツヲ, サバ, 等の好天然餌料なり.

イサヾアミ

Neomysis isaza *Marukawa*

(第六十二圖硏　第十五圖)　×10

頭端は鈍圓にして後觸角の鱗片は甚だ長く前方に至るに從ひて狹く其の末端は强棘に終る. 前觸角根基第一節は他の二節の和よりも長し. 尾節は舌狀をなし根基廣く兩緣に各 13 乃至 16 個の齒狀棘を列生し末緣に 4 棘あり就中外側の一對最も大なり. 尾肢內葉は尾節よりも長く外葉は更に遙に長し. 內葉の腹面平衡器の直下內側に櫛齒狀棘 27 乃至 32 個列生す. 體は淡褐色半透明, 卵囊部に黑色素發達す. 體長雌は 10 乃至 13 粍雄にては 8 乃至 10 粍霞ヶ浦及び兒島灣等に產す. 佃煮, 鹽辛に製し或は養魚餌料こして鹽藏せらる.

イイジマアミ

Anisomysis ijimai *Nakazawa*

(第六十二圖版　第十六圖)　×10

頭部前端は鈍圓, 眼は稍大なり. 第一觸角の根葉第三節の長さは短し. 鱗片の長さは幅の 7 乃至 8 倍あり. 其の根葉は 3 節し各節は略ぼ等長なり. 各觸角の鞭狀毛は其長さ雌雄により著しく相異し, 雄にては雌の 2 倍以上あり. 雄の第四腹脚の外葉は長くして尾節の中央に達す. 尾節は其後方圓盤狀をなし其周緣に約 18 個の棘を輪生す. 體長 7 乃至 7.7 粍, 淡褐色を帶び透明なり.

東京灣, 相模灣及び駿河灣等に多產す. 六, 七月頃多量に漁獲せらる. 佃煮こして食用にせらるゝ外, 鰺釣, 棒受網の撒餌に使用せらる.

ワタセアミ

Siriella watasei *Nakazawa*

(第六十二圖版　第十七圖)　×10

頭端は突出し眼球大なり. 鱗片の長さは幅の約 4 倍あり. 尾節の兩側には鋸齒狀の棘を列生し根基部には稍大なる棘 3 個あり. 尾節の後緣外角に各 1 個の大なる棘こ其間に 3 個の小棘こあり. 此小棘の中間より 1 對の細長なる毛を生ず. 尾肢外葉は著しく長く末端より $\frac{1}{3}$ の所に關節線あり. 其第一節の外緣末部に 9 乃至 12 個の棘を備ふ. 內葉の內緣には剛毛の外に鋸齒狀棘を密生す. 體は無色透明にして 8.5 乃至 10 粍あり. 分布はイイジマアミに同じ. イワシ, アヂ等の好天然餌料たり.

Euphausia pellucida *Dana*

" Suisyô-ami "

Pl. LXII, fig. 14.　×10

Two tooth-like processes project on ventral margin of carapace, the anterior one of which is large, more or less. Last segment of abdomen the longest. A small leaf-like-process, projecting towards upper part, is attached to first segment of basipodite of the first antenna, its terminal end being forked. Spinous process situated in abdominal part of scale of second antenna, a very large and small serriform teeth grow on its inner margin. Telson long; inner lobe of uropoda longer than that of outer lobe. Body-length 10-15 mm. Colourless and transparent.

It is abundant on our coast of the Pacific Ocean, in the Japan Sea, and East China Sea.

Neomysis isaza *Marukawa*

" Isaza-ami "

Pl. LXII, fig. 15.　×10

Rostrum obtuse; scale of posterior antenna very long becoming slender gradually in the direction of the anterior portion, and a spine grows on its terminal end. Length of the first segment of basipodite of anterior antenna longer than that of other 2 segments. Telson tongue-like in shape, its base wide and both margins furnished with a row of 13–16 tooth-like spines, and with 4 spines on its terminal margin, one pair on outer side being especially large. Exopodite of uropoda moreover longer than endopodite and about twice length of telson, 27–32 spines grow in a line on inner side just under statocyst of ventral side of endopodite of uropoda. Colour of body light brown and semi-transparent, but black pigment develops in portion of genital sack. Length of female 10–13 mm., that of male 8–10 mm. Abundant in Lake Kasumigaura and Bay of Kozima. It is used raw materials for manufacture of "Tukudani" "Siwokara," which are delicacies or preserved with salt for use as food in pisci-culture in ponds or in sea-fisheries.

Anisomysis ijimai *Nakazawa*

" Iizima-ami "

Pl. LXII, fig. 16.　×10

Anterior end of head obtuse; eyes large. Length of third segment of basipodite of first antenna short, length of scale is 7–8 times its width. Its basipodite has 3 segments and the width of each segment is almost equal to its length. Whip-like hair of each antenna of male differs from that of female. Length of male is twice that of female. Exopodite of fourth abdominal appendage of male long, reaching to central part of telson; posterior part of telson disc-like in shape, its margin being surrounded with about 18 spines. Body-length 7–7.7 mm. Colour light brown and transparent.

This animal is found abundantly in Tokyo, Sagami and Suruga Bays, and it is picked up with nets abundantly from June to July, and used as scattered bait for catching "Aji," species of carangidae.

Siriella watasei *Nakazawa*

" Watase-ami "

Pl. LXII, fig. 17.　×10

Rostrum projected, eye large. Length of scale about 4 times as long as its width. Serriform spines grow on both sides of telson segment, and 3 large spines on its basal portion. Each of the large spines on the outer angle and 3 small spines among them grow on the posterior margin of telson; one pair of slender hairs grows in the middle of these spines. Outer lobe of uropoda remarkably lengthened and has a segmental line at 1/3 of distance from terminal end; there are 9–12 spines on posterior part of outer margin of its first segment. On inner margin of inner lobe of uropoda not only setae but also serri-form spines grow densely. Length of body 8.5–10 mm. Colourless and transparent.

Distribution is the same as that of "Iizima-ami." It is a common food for "Iwasi" (*Amblyg ster*), "Adi" (*Trcchurus*) etc.

Sapphirina augusta *Dana*

" Otome-kaigara-mizinko "

Pl. LXII, fig. 9. (male), ×15. fig. 10. female) ×15.

Body very flattened, being wider and more flattened in the male than in the female; transparent of a glimmering bluish red and iridescent. Body-length is 2–2.5 mm.; anterior end of body composed of 5 segments; posterior end of female having 5 segments, of male 6 segments. Anterior end of head obtuse with one pair of crystalline eyes; first antenna short and five-jointed. Each basipodite of first to fourth appendage two-jointed; both exo- and endo-podite three-jointed; fifth appendage small and uni-lobe, its terminal end having two small spines and moreover there are small spines on its base; the length of fifth appendage 3 or 4 times as much as the width, but in male it is more or less short. Length of furca about twice the width in the female and inner side serrated, but in the male it is more than twice the width. This plankton lives in warm and tropical seas and is distributed in the southern warm sea from the coast of Awa province.

Daphnia morsei var. japonica *Ishikawa*

" Mizinko "

Pl. LXII, fig. 11, (female) ×15 fig. 12, (male) ×15

Colour of body pale-brown; covered with transparent carapace. Female 2–2.7 mm. and male 1–1.1 mm. in length. Posterior corner of ventral margin of head forms nearly a right angle. Head broad dorsally, laterally slightly concave at backward margin of eye, and again at frontal portion of back. Basal portion of spine bulges at ventral side. Abdominal processes covered with thick hair except the first which is slender and the longest; fourth is rudimentary but still remains. Anal spines 11–16 in number. The first antenna of male slightly curved. Distributed in central Japan; inhabits fresh-water ponds and pools. This species, with other micro-crustacean animals, has been known from ancient times in Japan as an indispensable food for rearing the post larvae of fresh-water fish in ponds.

Leptodora kindtii (*Focke*)

" Noro "

Pl. LXII, fig. 13.　×15

Body cylindrical, distinctly elongated and 4-segmented; shell reduced very much. Head long with a large compound-eye, wanted pigment fleck. First antenules small, short, movable, situated at ventral margin of head. Second antennae large with both rami 4-jointed, fit for swimming. Feet 6 pairs; the first pair the longest. Abdominal end terminated with a pair of claws, among those opens the anus. Oesophagus very long and intestine short only in the last abdominal segment situated. Body colourless, transparent. Length attains 4 mm. or little more.

This species moves actively from later spring to summer, feeds voraciously in night. It lives in large lakes as Biwa, Asi, Tiuzenji and Kasumigaura etc. and is a very useful zoo plankton as food of fresh-water fishes.

[illegible] (female) [illegible] are [illegible]. This is widely distributed [illegible] [illegible] from Tōhoku to Hokkaido. It multiplies [illegible] from April to May.

Temora stylifera Dana.

"[illegible]"

Pl. LVII, fig. 5. [illegible]

Body comparatively small. Anterior end of head rather flattened. [illegible] and fifth thoracic segments [illegible] to each other, their posterior angle ending in a [illegible] spine, the [illegible] end of which is [illegible] curved. [illegible] segment and furca [illegible] asymmetrical in the female. Lateral spine [illegible] curved posteriorly a little from the [illegible]. The first three [illegible] of second [illegible] two [illegible] and the right exopodite [illegible] other lateral spine of terminal segment of [illegible] appendage rather long in comparison [illegible] terminal spine. [illegible] of segment [illegible] [illegible]; a small spine [illegible] its [illegible] and [illegible] greater [illegible] of it. Colour of body [illegible]. Body length is 1·3-1·5 mm. This species [illegible] in the warm [illegible] of the Mediterranean, [illegible] and [illegible]; it is abundant in the southern seas of Japan.

Paracalanus parvus Claus

"[illegible]"

Pl. LXII, fig. 6. [illegible]

[illegible] body [illegible], almost well developed [illegible] end becoming [illegible]. Head [illegible] first thoracic segment. Fourth and fifth thoracic segments also fused. Colourless and transparent. Abdominal segment of female composed of [illegible] segments almost reaching to posterior end of [illegible]. The endopodite of first appendage [illegible], those of second to fourth appendages [illegible]. [illegible] outer side of [illegible] segment to [illegible] second to the [illegible] segments [illegible] small spines with exception of first and second segments of [illegible] of third appendage, and second segment of endopodite of fourth appendage. Body length of female [illegible] 0·74-1 mm. and that of male nearly equal. This plankton appears everywhere in shallow water in Japan, and is distributed in tropical and subtropical regions of [illegible].

[illegible] mirabilis Dana

"[illegible]"

Pl. LXII, fig. 7, female, [illegible]; fig. 8, male, [illegible]

Shape of male different from that of female. Body length 0·[illegible] mm. in male and [illegible] mm. in female. Colourless and very transparent but [illegible] composed of 4 segments, posterior part [illegible]. First antenna [illegible] 5 segments, second antenna [illegible] segments, the last segment provided with a large hook. Both exo- and endopodite of first to third appendages 3 [illegible] jointed. Exopodite of the fourth appendage three-jointed while the endopodite has no joints. Left and right separated from each other, and situated at end of [illegible]. Length of [illegible] about 1½ times length of 2 abdominal segments. Length of endopodite of fourth appendage longer than that of third segment of exopodite, and ratio between length of [illegible] and its width is [illegible] 13 in male. This plankton is found in warm water throughout the world and distributed in the ocean south of Bōsō, owing to the effect of the warm current.

[illegible]

"[illegible]"

[illegible]

[illegible] ([illegible]) and [illegible] [illegible] [illegible].

[illegible]

"[illegible]"

Pl. LXI, fig. [illegible]

Body [illegible] comparatively [illegible] [illegible] and [illegible] segment [illegible] of [illegible] [illegible]. The [illegible] of [illegible] [illegible] a few [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] [illegible] of the [illegible] [illegible] is [illegible] [illegible] southern part [illegible] Coast [illegible], [illegible] [illegible] and [illegible], etc.

[illegible]

"[illegible]"

Pl. LXIII, fig. [illegible]

Body small, colourless and transparent, but colour of [illegible] side of body, on [illegible] and on [illegible] are [illegible] yellowish [illegible]. Body length [illegible]-1·3 mm. Anterior end of [illegible] female [illegible] [illegible] and [illegible] [illegible] as long as [illegible] [illegible] reaches to ventral [illegible] segment. Anterior end of head [illegible] not project in the same manner as [illegible] [illegible] of central portion of fourth [illegible] width. Distribution world-wide [illegible] plankton abundant in [illegible] Waters, the Japan Sea, and the Pacific Ocean.

[illegible] serrulatus [illegible]

"[illegible]"

Pl. LXIII, fig. [illegible] (×20)

Body rather small, [illegible] mm. Colour of body light brown and transparent. First antenna composed of 12 segments, and its length does not exceed that of the second [illegible] and [illegible] segment, its terminal end furnished with narrow swimming [illegible]. Fifth appendage composed of only one segment; [illegible] process [illegible] terminal end, of which the inner one is rather [illegible] the other two are [illegible]. [illegible] is very long, the [illegible] body-length. [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

イトヒキカラミジンコ

Eucalanus attenuatus *Dana*

（第六十二圖版　第一圖）　×20

體は大にして細長し前頭部は三角形をなす．後體部は小なり．生殖關節と臀節との間には雌は一關節　雄は二關節あり．第二觸角の外葉の根基二節は各分離し，其内葉の第一節は長く幅の四倍あり．上顎の根葉第二節には二個の内刺あり．脚は短く外葉は三節，内葉は第一脚に於て二節，第二乃至第四脚に於て三節す．雌は第五脚を缺き，雄は之を備ふ．體は無色透明なり．雌の體長は 4 乃至4.9 粍を示し，雄は 3 乃至3.3 粍あり．暖海產外洋性にして地中海，大西洋，太平洋，紅海，印度洋に產す．我國近海暖海部に多し．

アカヒゲカラミジンコ

Calanus plumchrus *Marukawa*

（第六十二圖版　第二圖）　×15

體は大にして透明，赤色を帶び，觸角及び叉肢の刺毛は特に鮮紅色にして美麗なり．長楕圓形にして頭部前端は鈍圓なり．胸部第一節は頭部と明かに區別さる．第二乃至第四脚の根葉第二節には齒狀突起なく，第五脚は內外兩葉共に二節より成る．其根葉の緣には鋸齒を列生せず．叉肢の第二刺毛は長く其上に簇生せる羽毛には長き水平毛と短き垂直毛とあり．體は 4 乃至 5.5 粍．雄に不明なり．

北海產外洋性浮游動物にして犬吠岬以北，オホツク海，ベーリング海に普し．

ビジンオイトナミジンコ

Oithona plumifera *Baird*

（第六十二圖版　第三圖）　×80

體は小にして無色透明なるも觸角，叉肢及び體側に生ぜる刺毛は鮮麗なる黃赤色を呈す　體長 0.7 乃至 15 粍あり．頭端は雌にては尖り，其先端は嘴狀をなして腹方に彎曲す．叉肢は其長さ幅の 3 倍あり．第一觸角は腹部第四節の後緣に達す．雄の頭端には雌の如き嘴狀突起なく，中部腹節の長さは幅と略ぼ等し．地中海，北大西洋，北極海，太平洋側沿海，日本海及び東支那海等に多產す．

ノコバケンミジンコ

Cyclops serrulatus *Fischer*

（第六十二圖版　第四圖）　×20

體は稍小にして 1 乃至 1.6 粍，淡褐色透明なり　第一觸角は 12 節より成り．第二胸節を越へず．其末部の 3 節には極めて狹き膜あり．第五脚は唯 1 節より成り，先端に 3 個の附屬物あり．其最內方のものは小く銳く他の 2 個は細き刺あり．叉肢末端の刺毛は頗る長く其最長なるものは體長の約 ½ なり．第四胸節の腹緣には細毛あり．本種は臺灣より北海道に亘り分布し淡水產にして四，五月の候最も蕃殖す．

ハリテモラミジンコ

Temora stylifera *Dana*

（第六十二圖版　第五圖）　×30

體割合に小にして，頭端は寧ろ平かなり．第四，第五節は癒合し其後角は銳き棘狀突起に終るも其末端は稍彎曲す．臀節及び叉肢は左右相稱なり．叉肢上の刺毛中第二刺は雌に於て左右相稱ならず．叉肢上の側刺は其中央部より稍後方に生ず．雄の第二脚の左方の外葉は二節より成り，其右方の外葉は三節す．此の第五脚の末節の內側棘は 2 個の末棘に比し遙に長し．雄の第五脚の左方末節は扁平にして緣邊に小棘を存し內方には小棘毛を簇生す．體色淡赤色を帶ぶ．1.4 乃至 1.9 粍あり．暖海產外洋性にして大西洋，太平洋及び地中海に產す．我國にては南方暖海部に多し．

ヒメパラカラミジンコ

Paracalanus parvus *Claus*

（第六十二圖版　第六圖）　×60

體は小にして頭端は鈍圓，吻は能く發達して叉狀をなし，其末端細長となる．頭部は第一胸節と癒合し，第四及び第五胸節亦癒合す．體は無色透明にして，後體部は雌は 4，雄は 5 節す．第一觸角は 25 節し，殆ど體の後端に達す．第一脚の內葉は 2 節，第二第四脚の內葉は 3 節す．第二第四根葉の第一節の前後兩面には，細毛及び小なる棘を簇生し，第三脚外葉の第一及び第二節と第四脚の內葉の第二節には此の如き刺毛なし．體長 雌は 0.74 乃至 1 粍，雄 は 0.8 乃至 1 粍あり．地中海，大西洋の熱溫兩帶部に汎く分布す．我國沿岸到る所に產す．

メダマウミミジンコ

Copilia mirabilis *Dana*

（第六十二圖版　第七圖（雌）第八圖（雄））×12

體形は雌雄に依りて著しく相違す．體長は雄は 3 乃至 3.5 粍，雌は 5 乃至 5 5 粍あり．無色にして甚透明，眼球に橙黃色の色素あり．前體部は 4 節後體部は 5 節より成る．第一觸角は 5 節し，第二觸角は 4 節し，强大なる鉤を備ふ．脚は第一，第三對共に內外兩葉より成り，各葉は三節し第四脚は其外葉 3 節し內葉は 1 節より成る．雌の眼球は左右互に相離れ頭端に存す．其距離は眼徑の 2 倍なり．叉肢の長さは其前方 2 個の腹節の長さの約 1½ 倍に達す．第四脚の內葉は其外葉の第三節の長さよりも長く雄の頭長と雌の頭幅の比は 8 對 13 なり　各洋の暖海部に知られ我國近海にては暖流の影響顯著なる房總以南の暖海部に分布す．

オトメカイガラミジンコ

Sapphirina augusta *Dana.*

（第六十二圖版　第九圖（雄）第十圖（雌））×15

體は著しく扁平となり，雄は雌に比し體幅甚だ廣く板狀をなす．透明なるも青紅の虹彩を發す．體長 2 乃至 2 5 粍なり．前體部は 5 關節し後體部は雌は 5 關節，雄は 6 關節す．頭端は鈍圓にして水晶狀眼球 1 對を並存す．第一觸角は短小にして 5 節す．脚の第一乃至第四對は 2 節の根葉と 3 節の內外兩葉とより成る．第五脚は小にして單葉なり．其末端に二個の小棘を存し，其根元に尙ほ小刺を備ふ．第五脚は其長さ幅の 3 乃至 4 倍，雄にては其長さは稍短し．叉肢の長さは雌にては幅の約 2 倍にして內側は齒狀に突起す．雄にては約 2 倍餘あり．我國にては房總以南の暖海部に分布す．

Eucalanus attenuatus *Dana*

"Itohiki-kara-mizinko"

Pl. LXII, fig. 1.　×20

Body large and slender, anterior part of head triangular and posterior part of body small; genital and anal segments united each other in the female and those of the male jointed. First segment of endopodite elongated and 4 times as long as its width; second segment of basipondite of upper maxilliped has two inner spines. Each foot short, all the exopodite three-jointed. Endopodite of first two-jointed, those of the second to the fouth appendage each being three-jointed; appendage fifth lacking in female but found in male. Body colourless and transparent; the length of female reaches 4–4.9 mm. and that of male 3–3.3 mm. These animals live in warm waters and are distributed in the Mediterranean, Atlantic, Pacific and Indian Oceans and the Red Sea. They live only in warm regions in Japan.

Calanus plumchrus *Marukawa*

"Akahige-kara-mizinko"

Pl. LXII, fig. 2.　×15

Body large, long elliptic in shape and colourless transparent. Setae of antenna and furca fine red. Anterior end of head obtuse round, first segment of thoracic segment differs from head. Second segment of basipodite of second to fourth appendage not serrated; endo- and exo-podites of fifth appendage composed of 2 segments. Inner margin of first segment of basipodite not serrated. The second setae of furca the longest which carries along its axis horizontally and vertically a fine thick plumose, covering the horizontal portion being longer and thicker than the ventral plumose. Body-length 4–5.5 mm. Male not yet discovered. This plankton is one of the northern oceanic species and is distributed in northern part from Cape Inuboe; very common in Okhotsk and Bering Seas.

Oithona plumifera *Baird*

"Bizin-oitona-mizinko"

Pl. LXII, fig. 3.　×80

Body small, colourless, and transparent, but colour of spinous hairs on side of body, on antenna and on furca, are a brilliant yellowish red. Body-length 0.7–1.5 mm. Anterior end of head in female pointed and its terminal end curved like a beak in direction of ventral side.

Length of furca 3 times as long as its width, and first antenna reaches to ventral posterior margin of fourth segment. Anterior end of head of female does not project on the same manner as that of male. Length of central portion of fourth segment is equal to the width. Distribution world-wide; a coastal zooplankton abundant in Eastern Chinese Waters, the Japan Sea, and the Pacific Ocean.

Cyclops serrulatus *Fischer*

"Nokoba-kenmizinko"

Pl. LXII, fig. 4　×20

Body rather small, reaches 1–1.6 mm. Colour of body light brown and transparent. First antenna composed of 12 segments, and in length does not exceed that of the second thorax-segment and three segments of its terminal end furnished with narrow swimming membrane. Fifth appendage composed of only one segment; three accessory processes grow at its terminal end, of which the inner one is rather pointed but the other ones are slender spines. Furcal setae is very long; the longest being ½ its body-length. Ventral margin of fourth thorax-segment covered with slender hairs. This is widely distributed fresh-water plankton from Taiwan to Hokkaido. It multiplies extensively from April to May.

Temora stylifera *Dana*

"Hari-temora-mizinko"

Pl. LXII, fig. 5.　×3)

Body comparatively small. Anterior end of head rather flattened. Fourth and fifth thorax-segments jointed to each other, their posterior angle ending in a sharp spinous process, the terminal end of which is fairly curved. Anal segment and furca are not symmetrical in the female. Lateral spine on furca grows posteriorly a little from the central portion The left three exopodite of second appendage two jointed and the right expodite jointed. Inner lateral spine of terminal segment of the both appendage rather long in comparison with 2 the terminal spines. Left terminal segment of the fifth appendage flattened; a small spine grows on its margin, and spinous hairs grow on inner parts of it Colour of body light red. Body-length is 1.4-1.9 mm. This species has a pelagic life in the warm open water of the Mediterranean, Pacific, and Atlantic Oceans; it is abundant in the southern seas in Japan.

Paracalanus parvus *Claus*

"Hime-para-kara-mizinko"

Pl. LXII, fig. 6.　×60

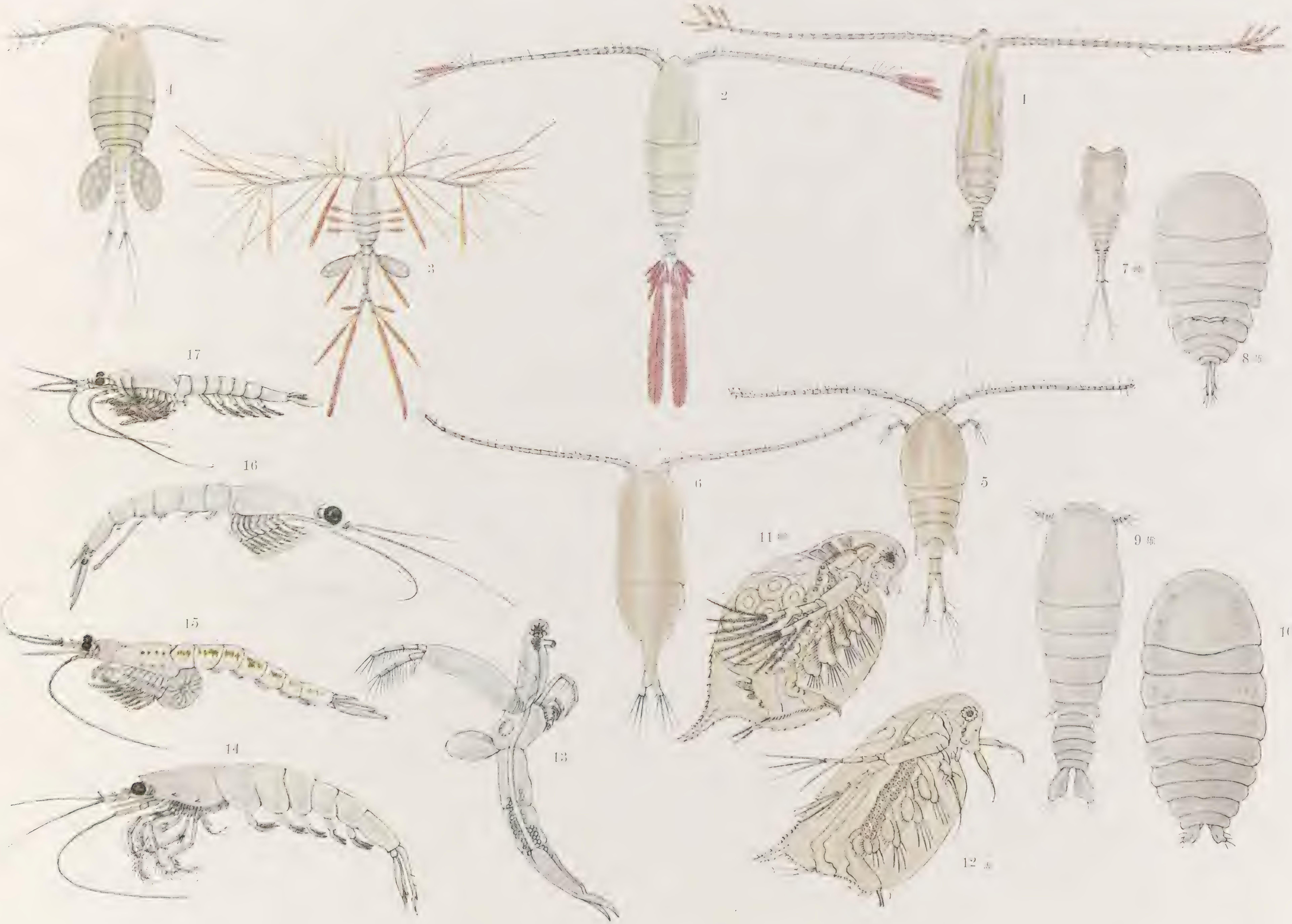
Body small, rostrum obtuse, snout well developed and forked, its terminal end becoming slender. Head fused with first thoracic segment. Fourth and fifth thoracic segments also fused. Colourless and transparent. Abdominal segment of female composed of 25 segments almost reaching to posterior end of body. The endopodite of first appendage two-jointed, those of second to fourth appendage three-jointed. Both of anterior and posterior sides of first segment of basipodites of the second to the fourth segments furnished with scattered small spines with exception of first and second segments of exopodite of third appendage, and second segment of endopodite of fourth appendage. Body-length of female reaches 0.74–1 mm. and that of male nearly equal. This plankton appears everywhere in shallow water in Japan, and is distributed in tropical and subtropical regions of oceans.

Copilia mirabilis *Dana*

"Medama-umi-mizinko"

Pl. LXII, fig. 7. female), ×12 fig. 8. (male), ×12

Shape of male different from that of female. Body-length 3–3.5 mm. in male and 5–5.5 mm. in female. Colourless, and very transparent but eyes coloured with yellowish orange pigment. Anterior part of body composed of 4 segments, posterior part of 5 segments. First antenna has 5 segments; second antenna 4 segments, the last segment provided with a large hook. Both exo- and endo-podite of first to third appendage 3 eyes, jointed. Exopodite of the fourth appendage three-jointed while the endopodite has no joints. Left and right separated from each other, and situated at end of head. Length of furca about 1½ times length of 2 abdominal segments. Length of endopodite of fourth appendage longer than that of third segment of exopodite, and ratio between length of head and its width is as 8 to 13 in male. This plankton is found in warm waters throughout the world and distributed in the ocean south of Bosyu, owing to the effect of the warm current.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カ イ ダ コ

Argonauta argo *Linné*

（第六十三圖版　第一圖）　×1

雌は雄より甚だ形大きく，外に白色の美麗なる貝殼を有す．腕長不等にして腕長式は 1>4>2>3 なり．第一腕は廣く，薄く翼狀に延長し，石灰質を分泌して貝殼を作る．貝殼は成長すれば 150 粍に達す．雌は貝殼中に抱卵して卵を保護す．雄は貝殼を有せずして甚だ小形なり．本邦廣く分布し北海道より臺灣に至る沿岸の砂底に棲息す．この貝殼を「アフヒガヒ」こ稱す．

フ ネ ダ コ

Argonauta hians *Solander*

（第六十三圖版　第二圖）　×1

雌は雄より甚だ大形にして，且外殼を有す．腕長は不等にして，腕長式は 1>2>3>4 なり．背腕は薄く，長く翼狀を呈し，前者同樣石灰質を分泌して貝殼を作る作用を有す．殼口は比較的廣く，側面の突起は凡 15–18 個あり．貝殼色彩淡セピア色にして，本邦中部より南海に亘り，廣く分布す．

テ ナ ガ ダ コ

Polypus variabilis *Sasaki*

（第六十三圖版　第三圖）　×$\frac{2}{3}$

本種は「マダコ」より小形なれご，その名の示す如く腕部甚だ長く，即第一腕の長さは頭胴部の約 5 倍に達す．腕長式は 1>2>3≒4 なり．吸盤明瞭にして 2 列交互に並列せり．色彩は甚だ變化すれごも「マダコ」より一般に灰白を呈し，背面に無數の淡黃色小點散布せり．

本邦沿岸到る所に分布し瀨戶內海に多し．食用に供す．この貝殼を「タコブネ」こ稱す．

イ ヒ ダ コ

Polypus fan-siao (*d'O·bigny*)

（第六十三圖版　第四圖）　×$\frac{1}{2}$

全長 200 粍餘の小形なる章魚にして，軀幹は楕圓形にして眼の前部即第三脚の基部兩側に光澤ある青黑色の環狀紋あるを特徵こす．淺海及內灣等の砂泥地に棲息し，初春に產卵す．卵は白色の米粒狀を呈し長徑約 8 粍內外，海中にある貝殼等に約 40–50 粒を產出す．卵を有する飯章魚を煮る時は，恰も內臟に米飯を入れし如き形狀をなす故にこの名を生ぜり．本邦中部より南海に廣く分布す．

マ ダ コ

Polypus vulgaris (*Lamarck*)

（第六十三圖版　第五圖）　×$\frac{1}{2}$

軀幹圓く表面に多數の肉疣あり．全長 600 粍餘に達す．體色は周圍の狀況により紫褐色こなり，灰白色こなり，或は赤褐色こなる．本州及以南の暖海に多く，常に岩礁間に隱れて棲息す．貪食性にして魚類，貝類，蝦蟹等を捕食す．八，九月の候藻類或は岩石間に產卵す．卵は薄き卵囊に包まれ，絲狀體を以て數多葡萄狀に連接し，恰も藤花に似たるを以て海藤花こ云ふ．瀨戶內海は著名なる產地なり．

ス ナ ダ コ

Polypus granulatus (*Lamarck*)

（第六十三圖版　第六圖）　×$\frac{1}{2}$

軀幹は楕圓形を呈し，中央部は最も幅廣し．外套の開口は體の半周よりも廣し．頭部は狹く，其背面は平坦なるか或は稍凹めり．腕足は殆んご同長なれご側部のものは他のものより稍長し．吸盤は密に分布し，最初の 4 個を除く他は 2 列に並び凡そ 40–44 對あり．

淺海砂底等に棲息し軀幹表面に小突起あり．本邦，東海より南海に棲息し食用こして美味ならず．

Argonauta argo *Linné*

" Kai-dako "

Pl. LXIII, fig. 1. (female)　×1

Sexes dimorphous. Female is much larger than the male, and has a beautiful white shell. Arms unequal, the formula of length being 1>4>2>3. Dorsal arm thickest, triangular on section at the proximal part, provided with a wide, conspicuous, winglike membrane along the aboral surface. Ventral arm distinctly longer than lateral arms. Full sized shell, 130-150 mm. in length, and 90 mm. in depth, markedly flattened laterally. Periphery very narrow, squarish tubercles, which number 60 or more when viewed laterally.

Widely distributed in tropical and temperate seas, and the north limit is Hokkaido in Japan.

Argonauta hians *Solander*

" Hune-dako "

Pl. LXIII, fig. 2. (female)　×1

Sexes dimorphous. Female is much larger than the male, and has an outershell. Arms unequal, the formula of length being 1>2>3>4. Dorsal arm the thickest and longest, furnished with a conspicuous, wing-like, dorsal web. Ventral arm decidedly shortest, its extremity not so fine as in lateral arm. Suckers large, prominent, expanded distally, strictly biserial throughout. Shell about two-thirds as broad as long. Aperture wide, ${}^{2}/_{3}$–${}^{5}/_{6}$ as great in transverse diameter as in longitudinal diameter. Laterally visible tubercles number about 15-18 in full sized shells. Full grown shell less than 85 mm. in length. Colour, light sepia, the depth being greatly variable in different specimens.

Widely distributed from central to southern Japan.

Polypus variabilis *Sasaki*

" Tenaga-dako "

Pl. LXIII, fig. 3.　×${}^{2}/_{3}$

Body elongate-ovoidal decidely longer than, or over twice as long as broad. The warts are easily slackened and flattened. There are found above each eye, 5-8, conical furuncle-like cirri.

Arms very long, considerably unequal, in the formula 1>2>3≒4. First arm exceedingly longer and stouter than the rest, the length measuring about twice that of the third or fourth arms. Suckers prominent, sparsely set in a double alternate row but the first four or five on each arm arranged in a slightly zigzag line.

Colour greatly variable but ordinarily paler than in *P. vulgris*, while living, numerous light yellowish blotches ranging up to several millimetres are found on the dorsal surface. Being common, Honsyu to Kyusyu especially in Inland Sea. Used as food.

Polypus fang-siao (*d'Orbigny*)

" Ii-dako "

Pl. LXIII, fig. 4.　×${}^{1}/_{2}$

Body longitudinal-ovate in contour, broadest in the middle or even a little more anteriorly, posterior end rounded but sometimes may be more or less acuminated. The warts expanded specimens, flattened off into brownish spots so as to render the whole external surface smooth and polished. In every case five or six circum orbital cirri are situated.

Arms of moderate size, uniform but the first pair shortest, gradually and evenly tapering towards the extremities.

The third right arm weakly hectocotylized, slightly shorter than the left third. Terminal organ shorter than ${}^{1}/_{18}$ the entire length of the arm. Colour of dorsal grayish purple, shading off to light on the ventral surface. A distinct ocular shining ring of yellowish colour is situated on the anterior part of the eye.

Commonly occurs from central to southern Japan; inhabit shallow sandy bottom.

Eggs of this species are very tasty.

Polypus vulgaris (*Lamarck*)

" Madako "

Pl. LXIII, fig. 5.　×${}^{1}/_{2}$

Body ovate in contour, slightly longer than broad, rounded behind. The warts conical or rounded, much more conspicuous on the dorsal surface of head and body than on the remaining parts. Around the eyes are found several cirri, of which about four are above each eye and are larger than the others.

Mantle-opening of moderate breadth, extending fully half round the body. Arms subequal, dorsal and ventral pairs a little longer than the others, measuring about thrice the length of head and body taken together. Suckers expanded at the distal end, sometimes slightly shriveled at margin, closely set in a double well defined series except at the base of the arms where they are in a single zigzag series. The third right arm weakly hectocotylized, terminal organ very small even in adult, measuring less than ${}^{1}/_{50}$ entire length of the opposite arm.

This species is the commonest octopus in middle and south Japan. Generally used as food.

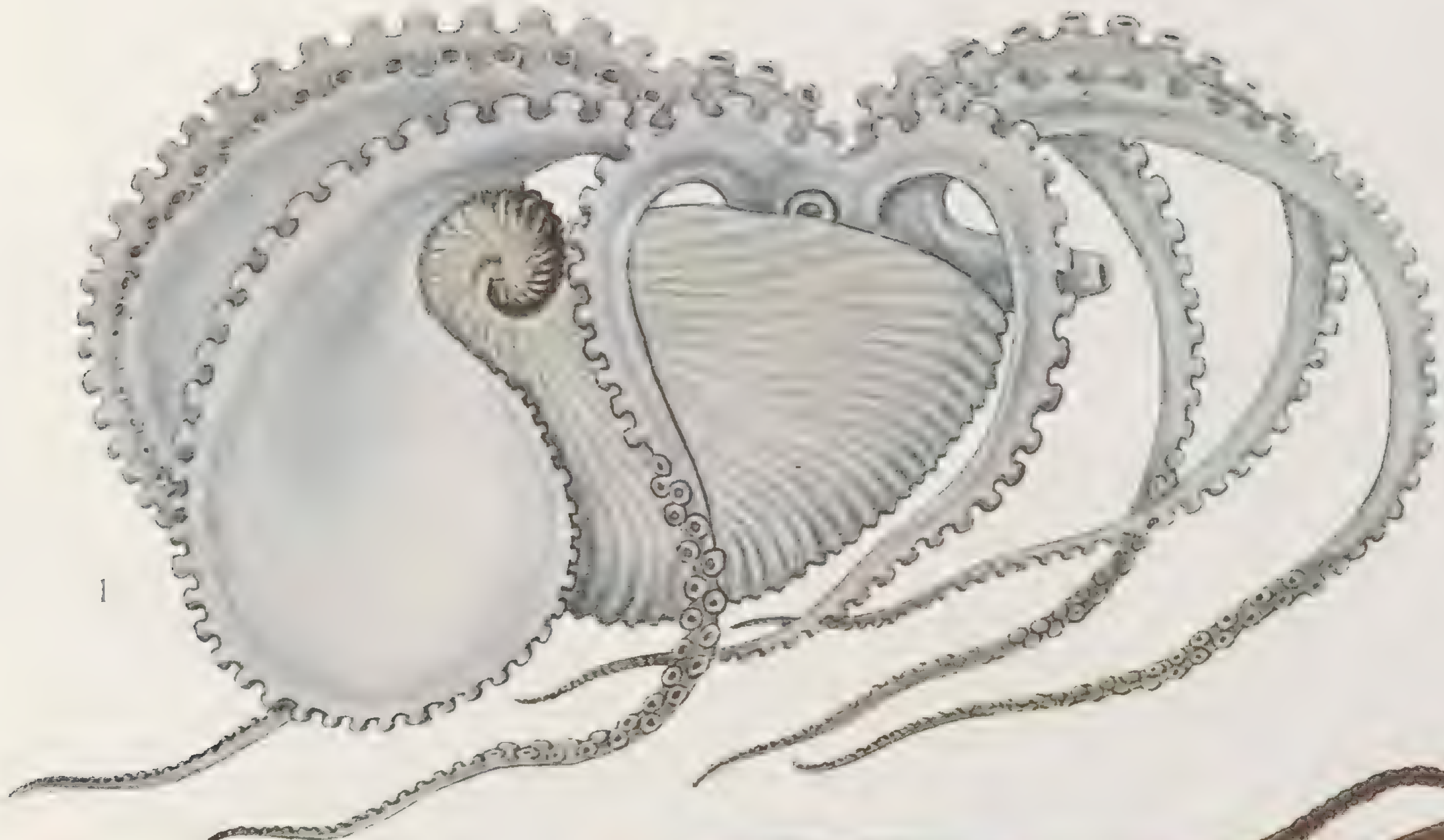
Polypus granulatus (*Lamarck*)

" Sunadako "

Pl. LXIII, fig. 6.　×${}^{1}/_{2}$

Body ovate or elliptical in contour, decidedly longer than wide, broadest near the middle, rounded behind, no marked longitudinal groove present on belly. Mantle opening broad extending more than half round the body. Head narrower than body marked off by constrictions both anteriorly and posteriorly, its dorsal surface flattened or even a little concave. Warts thickly set, each composed of several minute papillae; uniform in size, and one or two above each eye conspicuously developed into cirri. Arms nearly equal, but lateral pairs slightly longer than remaining pairs, and about thrice as long as the body length, or even a little longer. Suckers closely set, biserial except first three or four, which are uniserial, on the normal part number 40-44 pairs. Right third arm hectocotylized, a quarter shorter than the corresponding arm of the opposite side. Terminal organ slenderly conical, comprising about ${}^{1}/_{20}$ the entire length of the arm.

Widely distributed from central to southern Japan; lives in shallow sandy bottom in the sea.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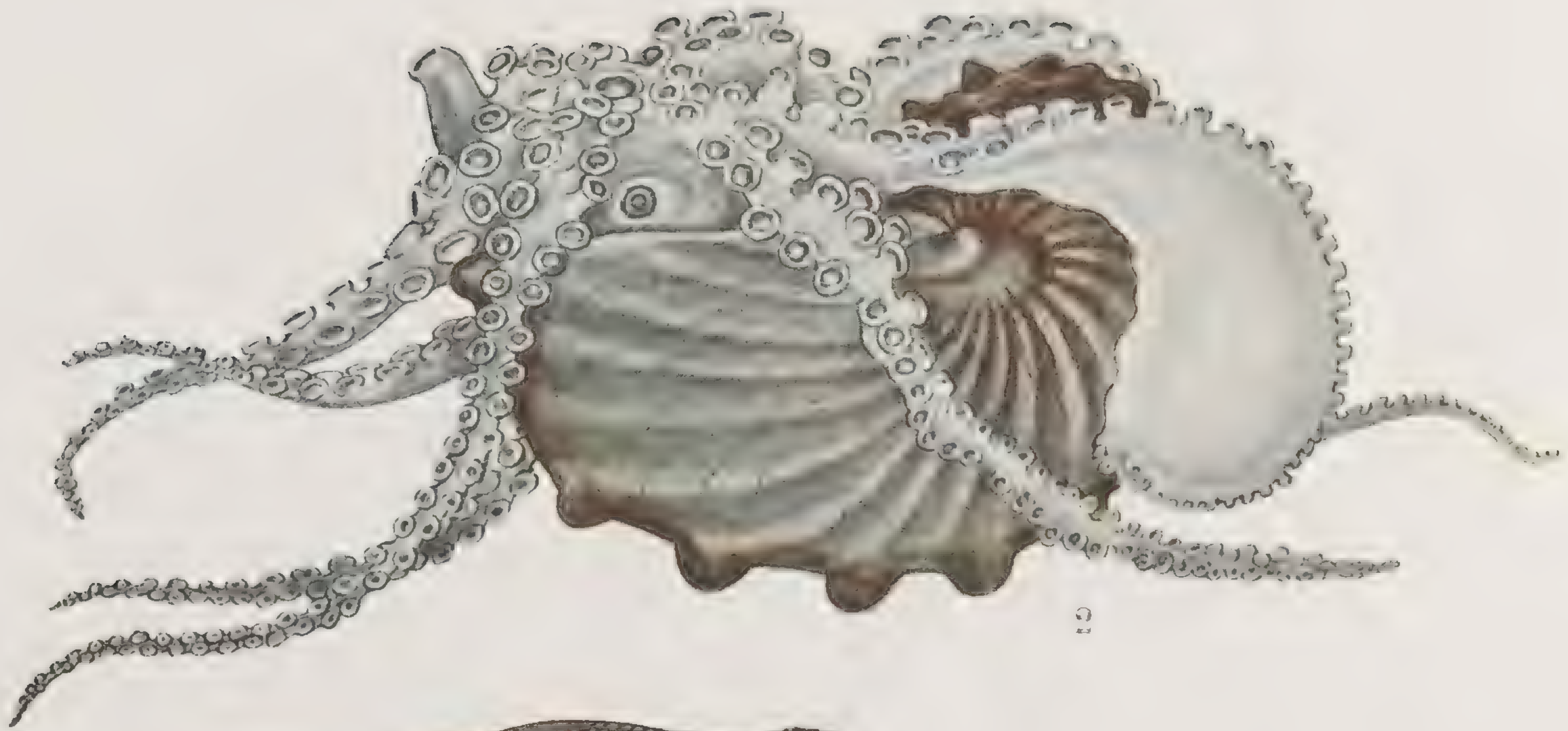
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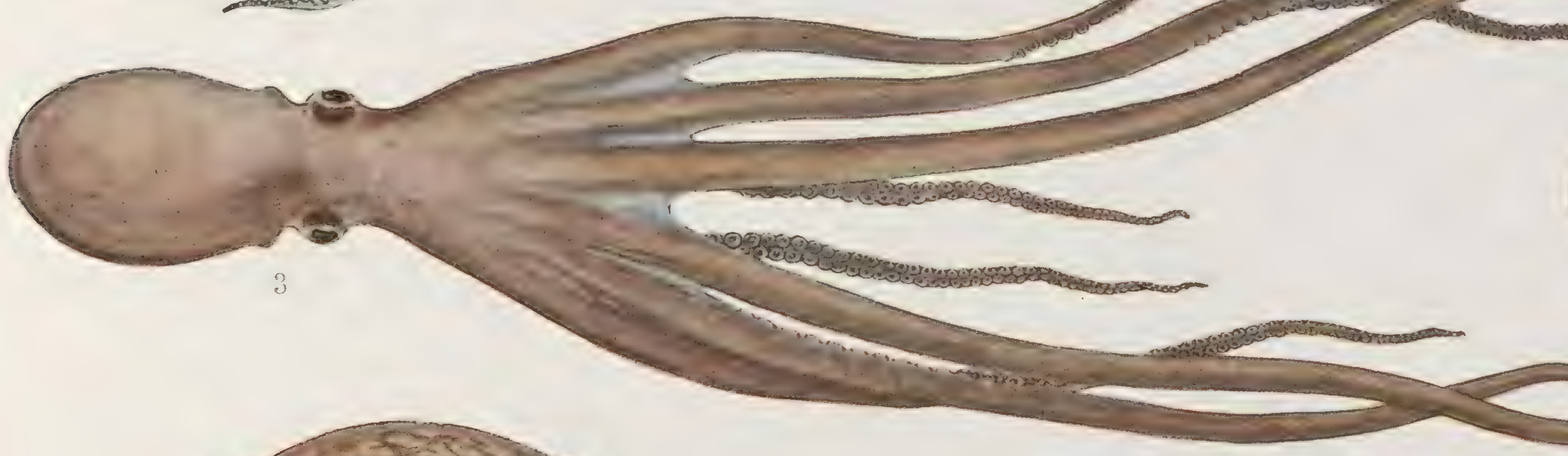
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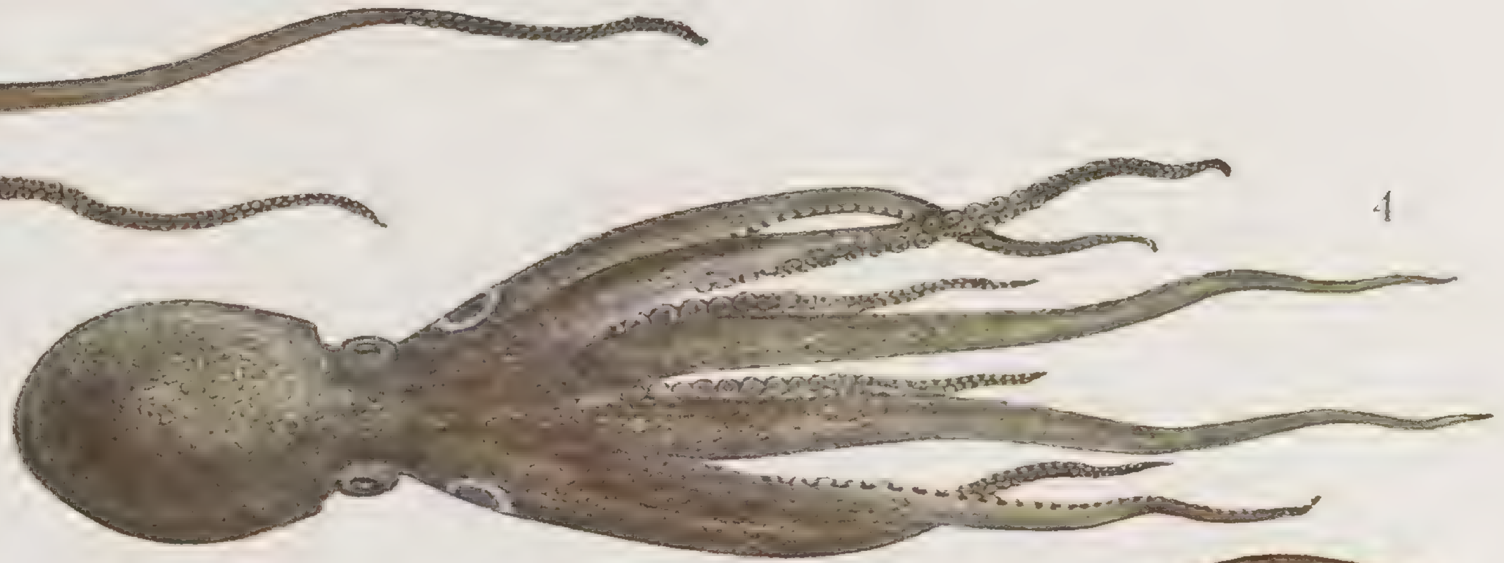
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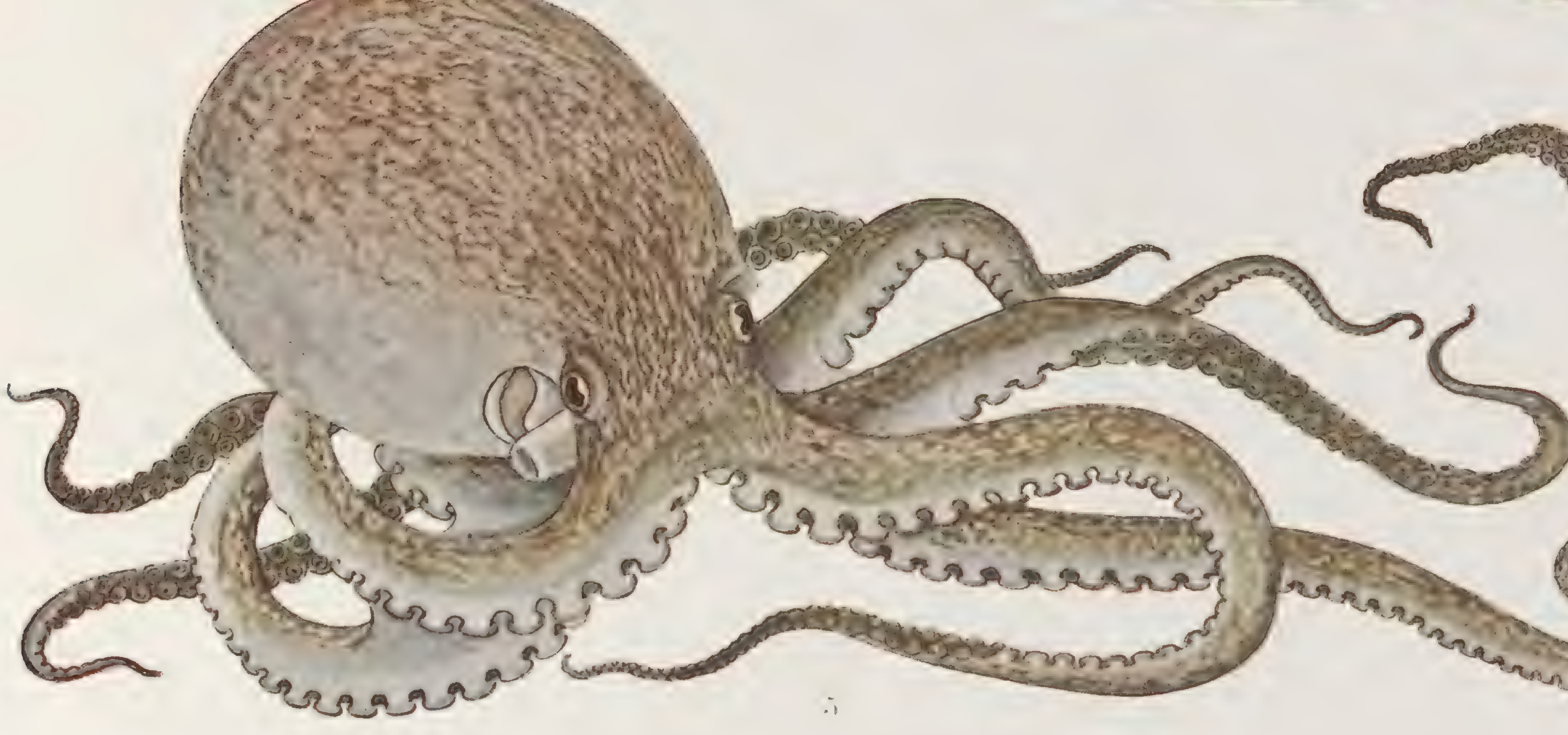
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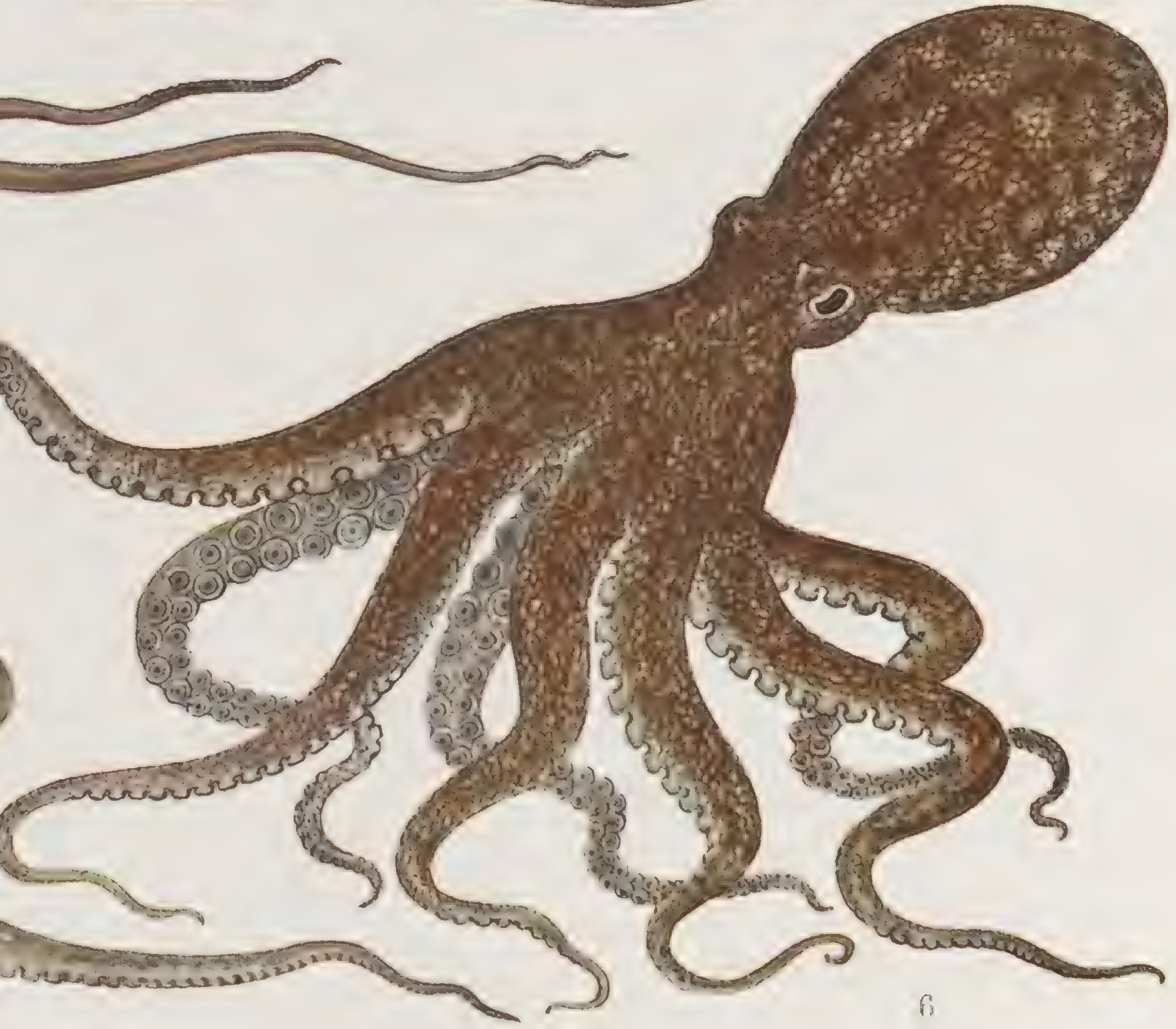

6

NATURAL

ミヽイカ

Euprymna morsei *Verrill*

（第六十四圖版　第一圖）　×1

小形なる種類にして，嚢狀を呈し後方圓形なり．鰭も殆んど圓く，體の後端よりも前端に近く附着せり．吸盤は4列に並ぶも基部に近き方と先端とは2列になれり．吸盤の大きさは雌に於ては同一なれど，雄に於て，邊緣にあるものは中央にあるものより大形なり．

左背腕は明らかに生殖腕となれり．觸手は凡そ胴長の1倍半あり．體に發光器を有す．北海道より東海方面に至る間廣く分布し淺海に棲息し，食用に供すれど産業的價値なし．

アホリイカ

Sepioteuthis lesoniana *Fèrussac*

（第六十四圖版　第二圖）　×½

體は稍圓筒形にして，後方鈍く終り，背腹に僅に扁平なり．肉質厚し．鰭は良く發達し胴部兩側の全部に附着せり．胴の中央部に於て最も廣し．漏斗大形にして，圓錐形を呈し，頭部の中央より稍前方に迄延長せり．腕長式は 3>4>2>1，にして最も長きものは胴長の半あり．吸盤はヘルメット型にして2列に並び，20–30 個の鋭き齒を存せり．

大形にして 450 粍に達し，體は半透明なるも多數の色素點を有し，且白色横線を存せり．本邦廣く分布し甚だ美味なり．

シリヤケイカ

Sepiella japonica *Sasaki*

（第六十四圖版　第三圖）　×⅔

體は楕圓形にして後端圓く，腹面に圓孔を開けり．鰭は側面全部に延び，後端接せり．腕長式は 4>3>2>1 なり．最も長きものは胴長の半より長し．吸盤甚だ多く 200 を越へ 4 列に密集せり．背面灰褐色にして，多數の白點を散在し，胴の後端は黄又は赤褐色を呈す．これ本種の特徴なり．又鰭の附着する所には明瞭なる線あり．本邦中部以南中國，九州に分布し，生鮮のまゝ或は甲付鯣として市場に販出す．

ハリイカ

Sepia andreana *Steenstrup*

（第六十四圖版　第四圖）　×1

體は稍楕圓形にして，後端は鈍く終り棘を突出せり．胴長は胴幅の 2½ 倍あり．雄は雌よりも稍細し．成長せる雄の腕長式は 2>4>3≒1．なるも雌に於ては 2>1>4>3 又は 2>1≒4≒3 なり．先端の數個の吸盤を除く外，齒を缺けり．觸腕は長く，頭と胴の長さと殆んど等し．

色彩は背面側部に黄斑を有し，中央部は淡褐色を呈す．本種の特徴は雄に於て第二腕の先端⅓（雌は⅕）は4列の吸盤並べる事なり．體長 120 粍に達し本邦北方の海に普通に棲息す．

ヤリイカ

Loligo bleekeri *Keferstein*

（第六十四圖版　第五圖），×⅔

體幅狹くして細長く，且後端尖れるを以て此名あり卽胴長は體幅の 6–7 倍あり．本種は「ケンサキイカ」に甚だ類似すれども形態稍細き事，吸盤は細小なる數列をなす事，雄の生殖腕は第三左腕にして腕頭太く，2列の櫛狀肉刺ある事等に於て異れり．

分布甚だ廣く，北は北海道より南九州の南端に至り春季より夏期に至り産卵す．此時期に於て多數の漁獲あり．此「イカ」の乾製品を笹鯣と稱し，味ひ佳良なり

ケンサキイカ

Loligo edulis *Hoyle*

（第六十四圖版　第六圖）　×⅔

體は前者同樣細長にして胴長は胴幅の 5–6 倍あり．鰭は長菱形にして其中央最も幅廣し．吸盤は口の上緣に 8–14 枚の齒あり．觸腕太く，腕頭に 4 列の吸盤ありて其中部の 10–14 個は大形なり．交接器は第四左腕にして凡 100 個の肉疣刺あり．直腸の左右に發光器を存す．

産卵期は春より初夏に續き，釣獲も此時期を盛期として尙十一月頃迄繼續す．體長 500 粍に達するものあり．乾製したるものを一番鯣と稱し鯣類中最良のものなり．肥前五島は著名なる産地にして五島鯣とも稱す．鰭及外皮を去りたるものを磨鯣と稱し豐後佐賀關の名産なり．

スルメイカ

Ommastrophes sloani pacificus (*Steenstrup*)

（第六十四圖版　第七圖）　×⅔

體形略圓筒形なれど，中央部最も幅廣く，上方に於ては稍狹く，後端細く終れり．鰭は後端に存し胴長の3/7あり．腕は殆んど等しく，吸盤は2列に存し，多數の鋭齒あり．第四右腕に交接器を有し先端太く吸盤退化せり．

本邦沿岸至る所に産し，殊に對島海流の流域に多く，外洋性にして夏期より秋期に及びて漁獲多し．肉食性にして暴食し屢々同類相喰む事あり．二番鯣として北海道より多數に製造さる．

Euprymna morsei *Verrill*

"Mimi-ika"

Pl. LXIV, fig. 1.　×1

Mantle saccular, rounded posteriorly. Fins subovate, attached much nearer to the anterior margin of mantle than to its posterior end. Arm suckers subglobular, with a small aperture, their peduncle thin; quadriserial but biserial at both base and extremity.

Left dorsal arm prominently hectocotylized. Tentacles variable in length, about half as long again as the mantle. Saddle-shaped luminous organ well developed. Small species, measuring 30-40 mm. in mantle length. Very common in Hokkaido, extending southward to the middle part of Japan

Sepioteuthis lesoniana *Fèrussac*

"Aori-ika"

Pl. LXIV, fig. 2.　×1/2

Body conico-cylindrical, ending bluntly behind, a little flattened dorso-ventrally, thick-walled; fins in adult, enormous, thick, muscular, extending nearly the whole length of the sides of mantle; both togerther ovate in contour, broadest about the middle.

Arms unequal, the formula of length is 3>4>2>1; the lengest about half the mantle length. Arm suckers roughly helmet-shaped, biserial throughout; horny ring is dentate on the whole margin; the teeth are sharp and conical, numbering about 20-30 in each ring.

Chromatophores large, numerous in the dorsal parts; the markings have a transverse white streak in the middle. Widely distributed along all coasts of Japan.

Sepiella japonica *Sasaki*

"Siriyake-ika"

Pl. LXIV, fig. 3.　×2/3

Body roughly ovate in contour; posterior end rounded, with a conspicuous glandular pore instead of spin. Fins begin at a distance from mantle margin, traversing posteriorly along the dorso-lateral surface of mantle and finally connected with each other behind, leaving only a sinuation at their junction. Arms nearly equal, the formula of length is 4>3>2>1; the longest a little longer than half the dorsal length of the mantle. Suckers number over 200 on each arm, thickly crowded in four series throughout, nearly uniform.

In fresh specimens, there are found numerous, roundish or oblong, shining spots evenly distributed on the back. Along attachment of each fin there runs a broad shining longitudinal streak which becomes gradually wider caudally. Just anterior to the junction there is a reddish stain which is probably connected with the caudal gland characteristic of this genus.

Commonly occurs in central and southern Japan.

Sepia andreana *Steenstrup*

"Hari-ika"

Pl. LXIV, fig. 4.　×1

Mantle roughly elliptical, bluntly terminating behind, where a spine projects as is usual in the genus. Dorsal length of mantle about 2 1/2 times the maximum breadth on an average, though the body of the male is a little more slender than that of the female. Arms dimorphic in the different sexes. In the adult male the formula of length is 2>4>3≒1; in the female, subequal, the formula of length is 2>1>4>3 or 2>1≒4≒3.

Colour of back when fresh, yellowish buff in the lateral parts, light brown along the median zone.

This species is well defined distinctly charcterized by the second arms, of which suckers are obliquely quadriserial in the proximal one-third of the male and one-fifth of the female.

Growth attains to 120 mm. in mantle length. Commonly distributed in northern Japan.

Loligo bleekeri *Keferstein*

"Yari-ika"

Pl. LXIV, fig. 5.　×2/3

Mantle very slender, from six to seven times as long as broad; nearly cylindrical in its anterior one-third, and then tapering very gradually to a sharply pointed extremity. Fins taken together rhomboidal, widest one-third of the way back, somewhat attenuated posteriorly, their anterior lateral edges slightly convex, and the posterior lateral edges a little concave.

Arms very short, somewhat unequal, the formula of length being 3>2>4>1; the longest attains about a quarter of the mantle length. Left ventral arm prominently hectocotylized, its distal part being abnormally thickened and the extreme tip blunt.

Tentacles only 1/3–1/2 as long as mantle, thinner than any arm, their suckers minute, numerous, those on central part equipped with 10-14 long, uniform teeth on the distal margin.

This species is one of the commonest and most widely distributed,—Hokkaido to southern Japan.

Loligo edulis *Hoyle*

"Kensaki-ika"

Pl. LXIV, fig. 6.　×2/3

Mantle slender, of about uniform breadth for a quarter of the length from the anterior margin, and then tapering gradually to a more or less acuminated extremity; the breadth in full grown specimens is about 1/5–1/6 of its length. Fins longitudinal-rhomboidal, broadest in front of the middle. Arms unequal, the formula or length being 3>4>2>1, longest arm is about 1/3 as long as the body. Suckers biserial as usual, largest suckers being on third arms. Horny ring in all suckers equipped with eight to eleven, long, square-cut teeth on the distal margin.

Left ventral arm hectocotylized as usual, the affected part situated on the distal extremity, comprising a little more than half the entire length.

Widely distributed, with northern limit about the Tugaru strait. It is most abundant in Kyusyu and is also caught plentifully around Tusima, and Goto Island. Used as food.

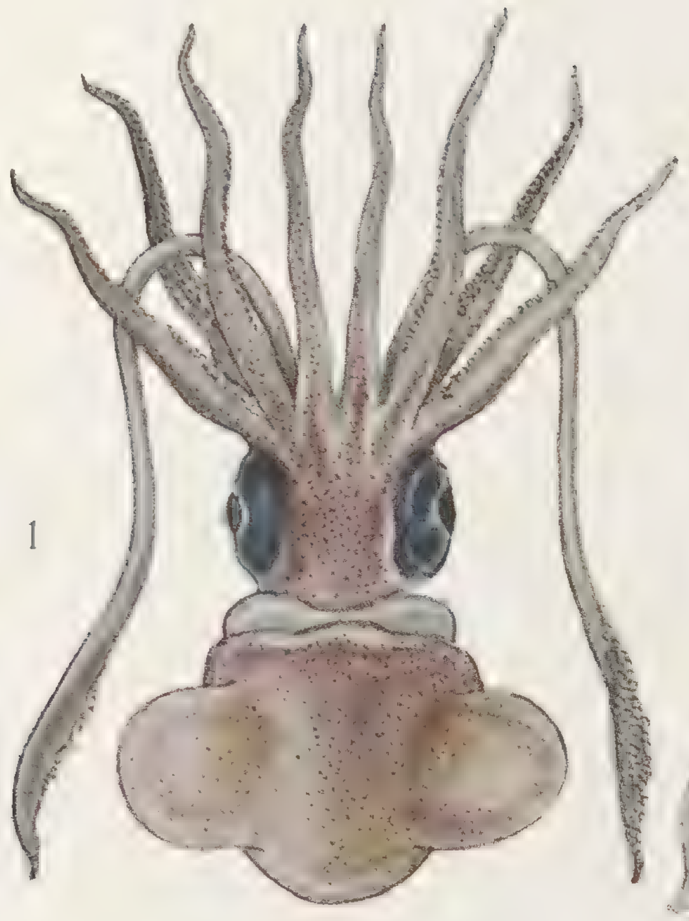
Ommastrephes sloani pacificus (*Steenstrup*)

"Surume-ika"

Pl. LXIV, fig. 7.　×2/3

Mantle slenderly subfusiform, usually slightly narrowed behind its free margin. Fins taken together broadly sagittate, its length equals to 3/7 of the mantle. Arms almost equal, the longest about half as long as the mantle. Arm suckers biserial throughout, horny rings dentate on the distal as well as the lateral margins, the teeth being strong, sharply pointed, numbering 6-14 Right ventral arm hectocotylized.

Colour in life, reddish brown, deeper above than below. Commonest cuttle fish in Japan, and has wide distribution extending from Kiusiu to Hokkaido. It is specially abundant in the districts washed by the Tugaru Current, where the fishing season continues from summer to winter.



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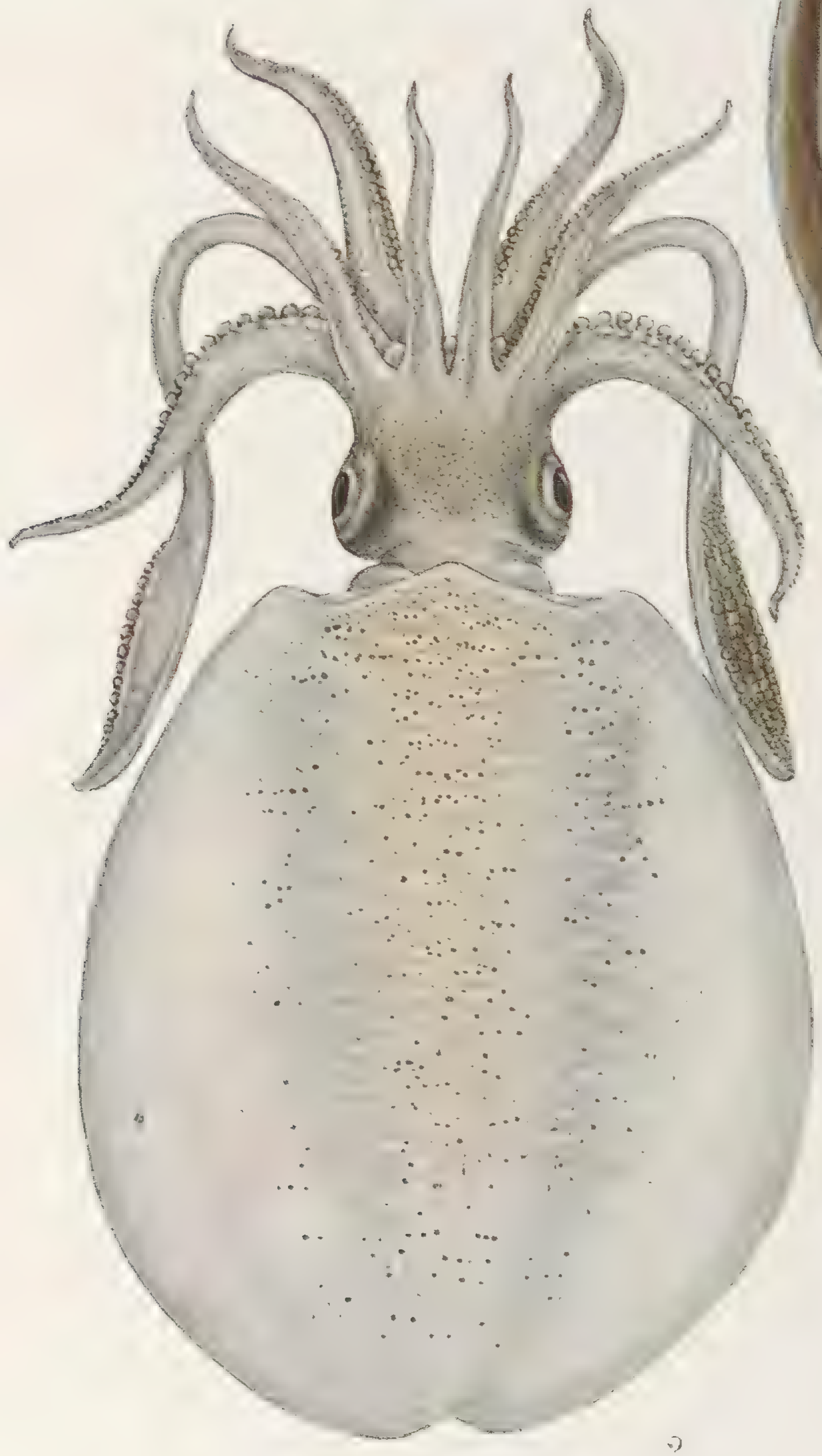

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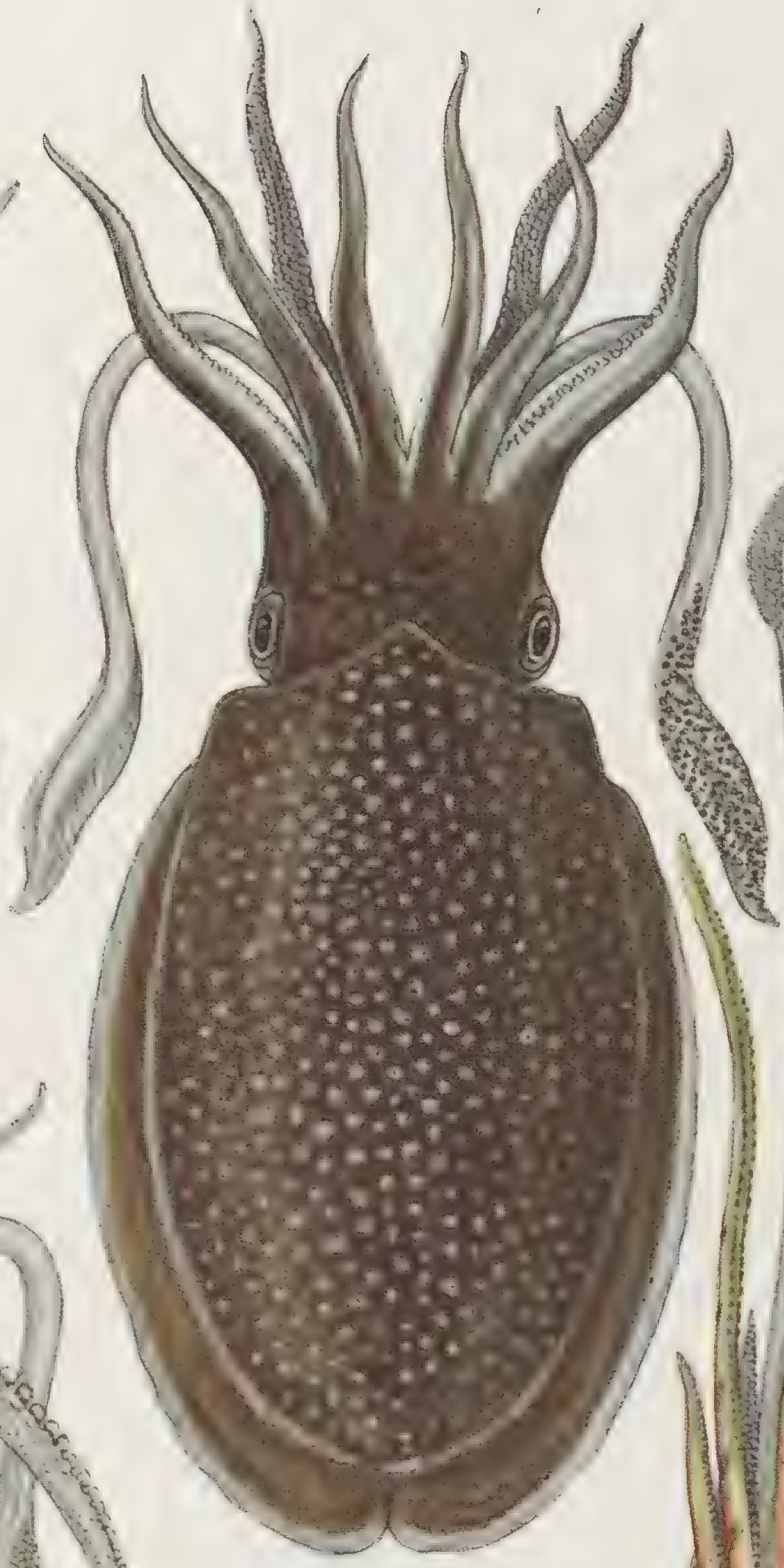

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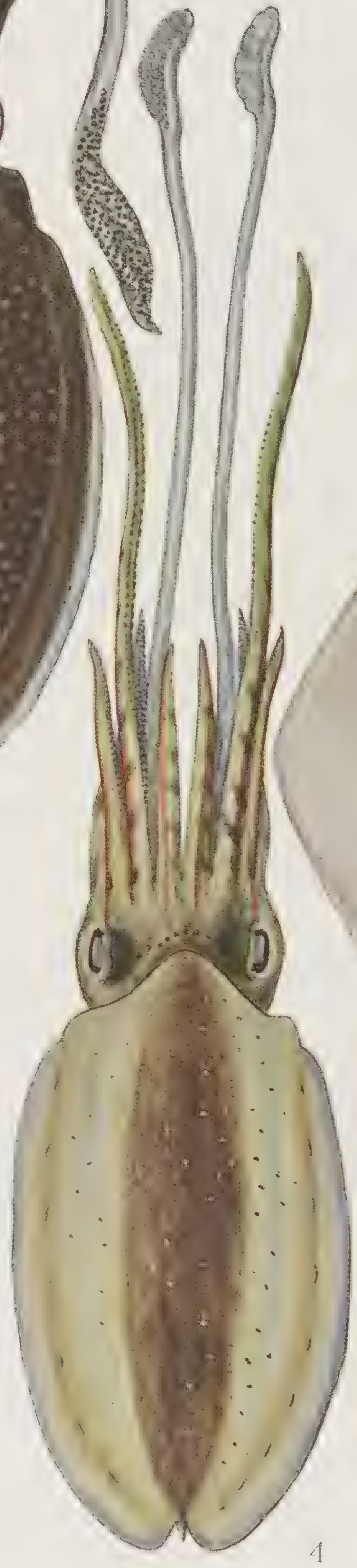

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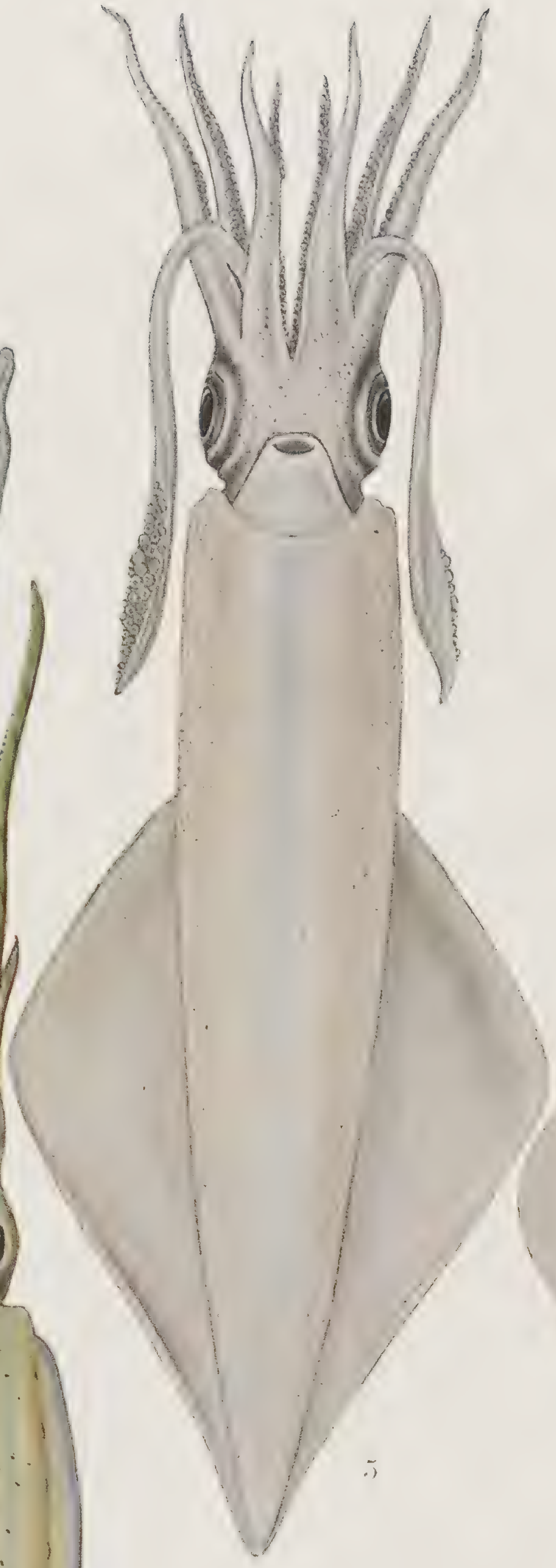

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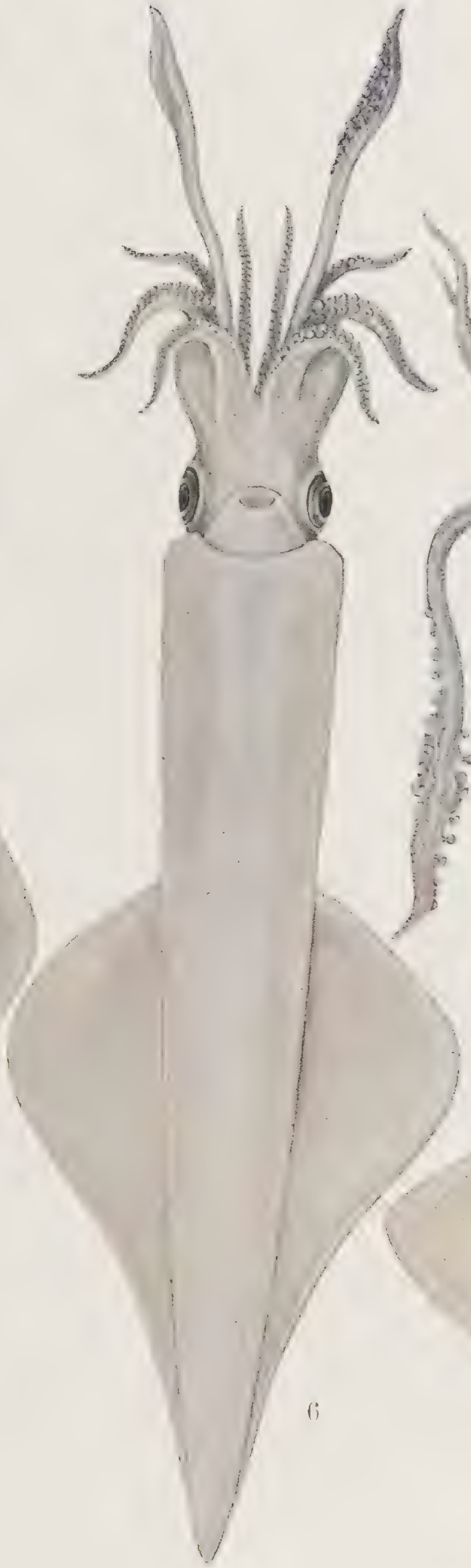

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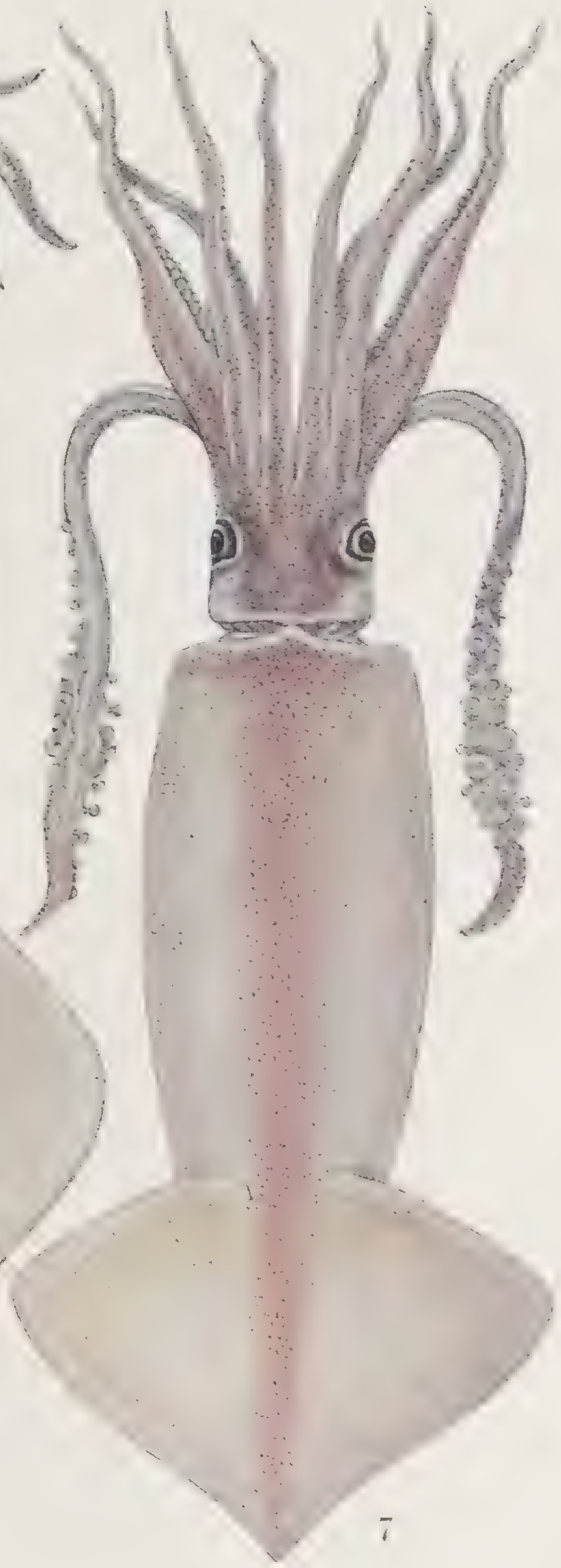


7

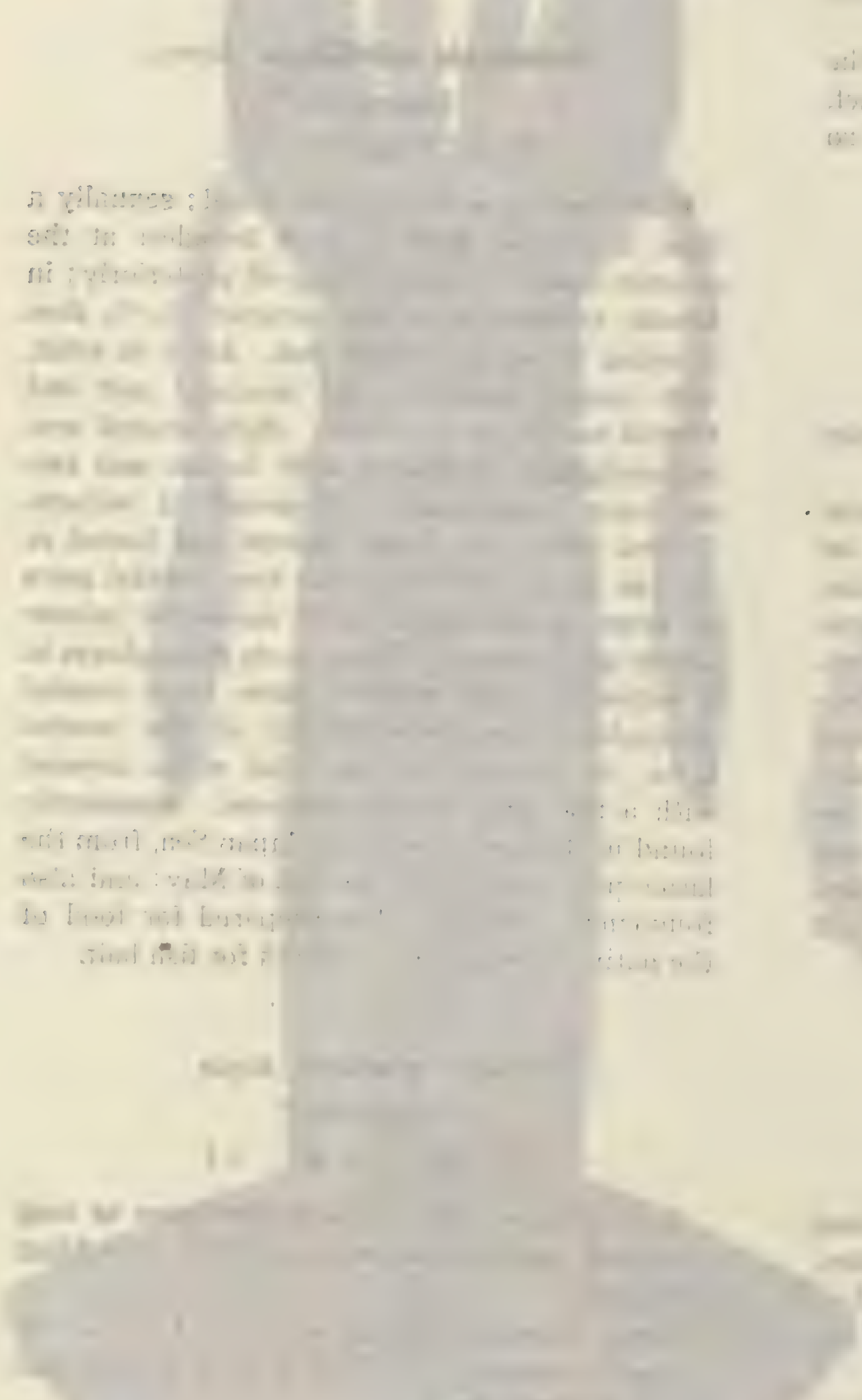
NATIONAL
VICTORIA

dorsal margin protrudes in a triangular lobe which measures [illegible] as long as the mantle. Arms almost equal in length; suckers clearly quadriserial throughout. Left ventral arm hectocotylised as is usual in the genus.

Dorsal surface of mantle in life thickly striped with numerous chocolate brown transverse lines of various thickness, and sparsely dotted with minute yellowish tubercles.

Shell broad, [illegible] as wide as long, elliptical but less blunter anteriorly than posteriorly, where it is specially a little expanded due to the great development of [illegible]

[illegible] one of the commonest Sepia [illegible] being [illegible] on [illegible] side.



[illegible]; generally a [illegible] at the [illegible] in [illegible]

[illegible] found [illegible] Sea, from the [illegible] of May and also [illegible] prepared for food of [illegible] for fish bait.

[illegible]

Club [illegible] in outline; [illegible] distinctly quadriserial throughout, unequal in size. Distal half of left ventral arm hectocotylised, provided with about 12 papillae arranged in two series as usual. Mantle measures up to about 120 mm in length.

Commonly occurs in Hokkaido to Kyushu, on the Japan Sea.

Stenoteuthis bartrami (Lesueur)

[illegible]

Pl. LXV, fig. 1, [illegible]

Mantle subfusiform, very gradually widening from the [illegible] margin to the middle where it is broadest, and then it tapers to the caudal end. Fins large, [illegible] wide, [illegible]. Arms nearly equal, but the dorsal pair is a little shorter than the others, which are of equal length and about half as long as the mantle. Arm-suckers biserial, of zigzag arrangement. The principal difference [illegible] is that the accessory [illegible] on the distal marginal surface of tentacles [illegible] instead of [illegible] and that the [illegible] part of the [illegible] gradually and uniformly tapers caudally, without showing any sudden narrowing.

Colour in life vivid maroon; deeper on the dorsal surface which is tinged with violet. Widely distributed, nearly cosmopolitan, not so common.

[illegible] (Leach)

Pl. LXV [illegible]

[illegible]

Loligo [illegible]

[illegible]

Pl. LXV [illegible]

[illegible] with [illegible] the longest [illegible] mantle length.

[illegible]

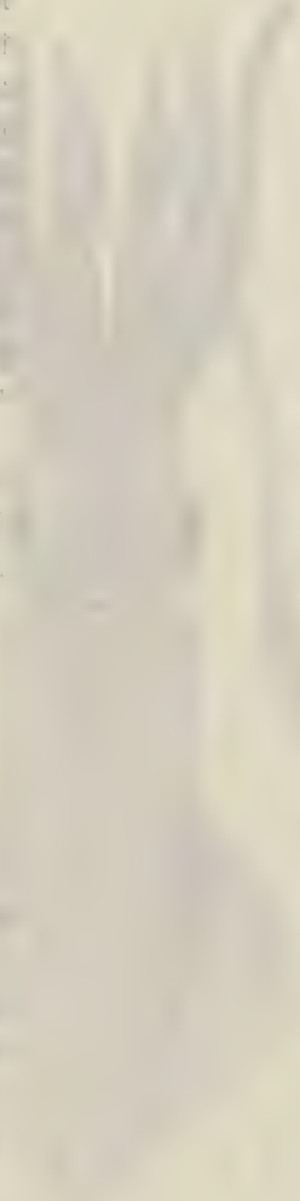
[illegible] and common in [illegible] quantity for the market under the name of "Ika" or "Ikaji."

Sepia esculenta Hoyle

[illegible]

Pl. LXV, fig. 4, [illegible]

Body roughly ovate in contour, but more or less [illegible] round, the maximum breadth a little greater than half the dorsal length. Dorsal margin of mantle slightly emarginated while the



[illegible]

バカイカ

Stenoteuthis bartrami (*Lesueur*)

（第六十五圖版　第一圖）　×½

胴部は紡錘狀に近く，前緣より中央に漸次膨大し後緣に向ひ尖細となる．鰭は橫長の菱形をなし長さ胴の半長に達せず．腕は略等長にして2列の吸盤を有し，口に鋭齒を具ふ．大形なる吸盤には大小交互に配列せる齒數30を具ふ．觸腕は胴長の半に達し其先端の半長は舟形に太まり4列の吸盤を有す．雄の交接器は第4右腕にして其腕頭は平滑且吸盤なし．

大洋に分布し，本邦にては本州及其以南に分布す．

スジイカ

Symplectoteuthis luminosa *Sasaki*

（第六十五圖版　第二圖）　×½

胴部は圓錐形にして，前緣部太く後緣部は尖細となる．鰭は廣く箭根形を呈す．吸盤は半圓或は球形に近く，牙狀齒を有し各腕に24–30對配列す．第四左腕は右腕と等長にして尖端の$\frac{1}{3}$は變形す．觸腕は胴長の$\frac{1}{2}$–$\frac{3}{4}$にして腕頭に4列の吸盤を有す．背面は赤褐色，胴部に青白色の2縱條を、又頭部表面に2個の楕圓斑を有す．尙第四腕腹面に1個の長楕圓斑有り．之等は發光器と見做さる．

胴長102–195粍を有す．中部及南日本に分布す．

ベイカ

Loligo beka *Sasaki*

（第六十五圖版　第三圖）　×1

胴部は稍圓錐形に近く鈍端を以て終る．鰭は菱形にして胴長の半を超ゆ．腕は長さ不同，腕長式は3>2>4>1なり．最長腕は胴長の半よりも少し長し．吸盤は小さく，幅廣き3–5枚の板狀齒密生す．雄の第4左腕は交接器にしてその尖端の$\frac{2}{3}$は變形しその吸盤は變じて25對の柔軟隆起となる．觸腕は胴長に等しく，吸盤小にして4列の圓錐齒あり．

胴長70粍位に達す．南日本特に兒島灣の名產なり．

コウイカ

Sepia esculenta *Hoyle*

マイカ

（第六十五圖版　第四圖）　×⅔

胴部は卵圓形をなし，胴長20糎內外に達し，その後端に1小棘を有す．鰭は狹く胴の全緣に附着す．腕は等長にして胴長の凡そ半分に達し4列の吸盤を有す．觸腕は胴長に等しく腕頭は半月形に擴がり吸盤は小さく10數列をなし各々30–40の齒を具ふ．胴の背面には數多の暗褐色の橫條あり．甲羅は舟形を呈し，後端より1小棘を出す．

五，六月の候內灣に來り海藻其他に木實狀の卵を産み付く．本州，四國，九州の內灣に分布し，東京附近にては「マイカ」と稱し，肉味良好生鮮のまゝ處理せらる．又その墨汁を利用し繪具の「セピア」を作る．

ホタルイカ

Watasenia scintillans (*Berry*)

（第六十五圖版　第五圖）　×1

體軀は紡錘狀にして，胴長短く6糎を超へず．鰭はその長さ胴長の半に達し箭根形をなす．胴,頭,腕總ての腹面並眼球の周圍には無數の小發光器を有し尙又第4腕の先端にある3個の大發光器は强烈なる光を發す．發光器は雌雄の區別なく一樣に發達し，蕃殖期特に發光强烈なり．腕は不等にして2列の鈎及吸盤あり．觸腕は胴長より短く腕頭は長刀狀に膨み大なる2本の鈎と5列をなす多數の吸盤を有す．雄の第4右腳は交接器なり本邦特產にして富山縣特に滑川の名產なり．この外相模灣にも產し，產卵期は四，五月の候なり．

生鮮のまゝ食用に供せられ又罐詰或は餌料等に用ひらる．

ジンドウイカ

Loligo japonica *Hoyle*

（第六十五圖版　第六圖）　×1

胴は紡錘形にして先端鈍く，幅は長さの約¼に等し鰭は其長さ胴長の半を超へ菱形．腕は長さ不同にして腕長式は3>4>2>1にして最長腕は雄より雌の方長く胴長の半を少し超ゆ．吸盤は大さ不同にして，總ての吸盤に幅廣き板狀齒密接す．觸腕は太く，槍鋒狀を呈し大さ不同の4列の吸盤を備ふ．

雄の第4左腕は交接器にして，其先端の半分は變形し40對の肉刺あり．分布は北海道より九州に亘る．

Stenoteuthis bartrami (*Lesueur*)

"Baka-ika"

Pl. LXV, fig. 1.　×$^1/_2$

Mantle subfusiform, very gradually widening from the anterior margin to the middle where it is broadest, and then it tapers to the caudal end. Eye large, eye-opening wide, distinct. Arms nearly equal, but the dorsal pair is a little shorter than the others, which are of equal length and about half as long as the mantle. Arm-suckers biserial, of zigzag arrangement. The principal differences of the specimens are that the accesory teeth in the distal marginal suckers of tentacles are almost sharply pointed, cuniform, instead of being crenelated, and that the axial part of the gradius gradually and uniformly tapers caudally, without forming any sudden narrowing.

Colour in life vivid maroon; deeper in the dorsal surface which is tinged with violet. Widely distributed, nearly cosmopolitan, not so common.

Symplectoteuthis luminosa *Sasaki*

"Suzi-ika"

Pl. LXV, fig. 2.　×$^1/_2$

Body nicely conical, broadest in the anterior end, then tapering to a slender end-part.

Arm-suckers hemispherical or subglobular biserial throughout, numbering 24-30 pairs on each arm; horny rings of arm-suckers all dentate.

Left ventral arm about as long as right ventral arm, hectocotylized in the distal one-third.

Colour, reddish brown, deeper above. Two longitudinal paler stripes found on belly two oval patches on the corresponding surface of head and an oblong patch on the ventral surface of the fourth arms; all are regarded as luminous organs.

The mantle length of this species ranges from 102 mm. to 195 mm. Occurring in central and southern Japan.

Loligo beka *Sasaki*

"Beika" "Beka"

Pl. LXV, fig. 3.　×1

Body thin-walled, roughly conical. Fins taken together rhomboidal, their lateral angles rounded. Arms unequal, the formula of length being 3>2>4>1; the longest a little longer than half the mantle length.

Suckers small, horny ring in all suckers equipped with three to five, very broad, platelike teeth. Distal two-thirds of left ventral arm hectocotylized.

Tentacles about as long as the body; suckers small, quadriserial throughout. They measure up to about 70 mm. in mantle length, the sexual mature ones being over 55 mm.

Occurring along the southern coast of Japan, and common in Kozima Gulf where it is caught plentifully for the market under the name of "Beka" or "Beika."

Sepia esculenta *Hoyle*

"Kô-ika"

Pl. LXV, fig. 4.　×$^2/_3$

Body roughly ovate in contour, but more or less conical behind, the maximum breadth a little greater than half the dorsal length. Ventral margin of mantle slightly emarginated while the dorsal margin protrudes in a triangular lobe about one-seventh as long as the mantle. Arms almost equal in length; suckers clearly quadriserial throughout. Left ventral arm hectocotylized as is usual in the genus.

Dorsal surface of mantle in life thickly striped with numerous chocolate brown transverse lines of various thickness, and sparsely dotted with minute yellowish tubercles.

Shell broad, $^1/_3$–$^2/_5$ as wide as long, elliptical but less blunter anteriorly than posteriorly, where it is specially a little expanded, due to the great development of the outer cone.

The species is one of the commonest *Sepia* found in the middle part of Japan, being especially abundant on the Pacific coast side.

Watasenia scintillans (*Berry*)

"Hotaru-ika"

Pl. LXV, fig. 5.　×1

Body conical or conico-cylindrical; sexually a little dimorphic; that in male broadest at the anterior margin, then tapering off posteriorly; in female cylindrical in the anterior $^2/_7$–$^3/_7$, then tapering to an acuminate end. Arms in adult, with biserial hooks on the proximal part and biserial suckers on the distal. Right ventral arm hectocotylized, furnished with hooks and two semilunar membranes but devoid of suckers. Ventral surface of head, mantle and funnel as well as aboral surface of the two ventral pairs of arms all decorated with numerous minute pearly photophores. Five minute photophores in a series on each eyeball, three large ovoidal photophores on the extremity of the ventral arms. In life they are greenish white, covered with a few large chromatophores. Abundantly found in Toyama Bay of the Japan Sea, from the latter part of April to the end of May: and also found in Sagami Bay. It is prepared for food of the natives, but many are salted for fish bait.

Loligo japonica *Hoyle*

"Zindô-ika"

Pl. LXV, fig. 6.　×1

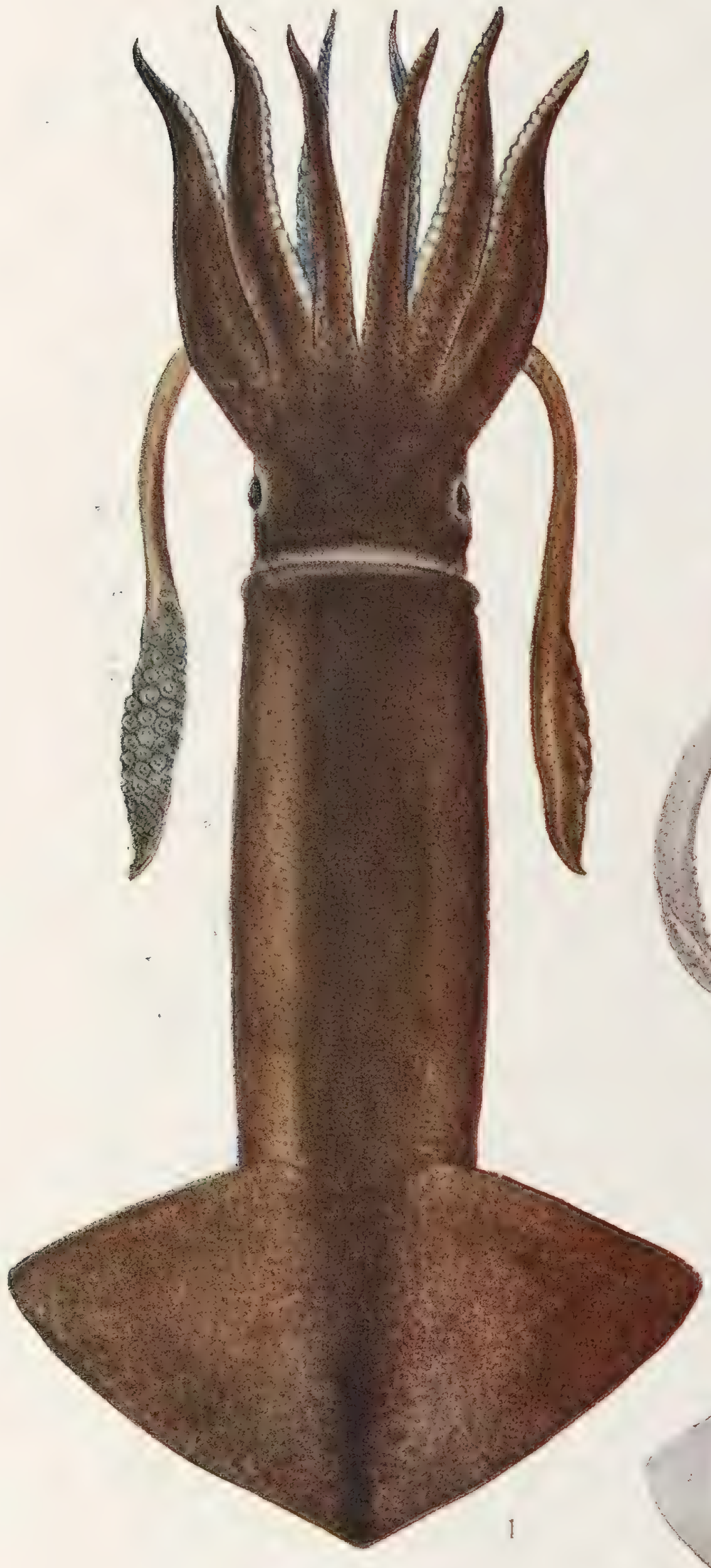
Body slender conical, about four times as long as broad, widest anteriorly, tapering to a blunt extremity.

Arms unequal, length being 3>4>2>1, the longest in female about half as long as body but much longer in male.

Arm suckers as wide as deep, unequal in size in different arms; horny ring in all suckers dentate, the teeth being platelike in shape, ordinarily rectangular but sometimes semilunar.

Club expanded, lanceolate in contour; suckers distinctly quadriserial throughout, unequal in size. Distal half of left ventral arm hectocotylized, provided with about 75 papillæ arranged in two series as usual. Mantle measuring up to about 120 mm. in length.

Commonly occurs in Hokkaido to Kyusyu, and the Japan Sea.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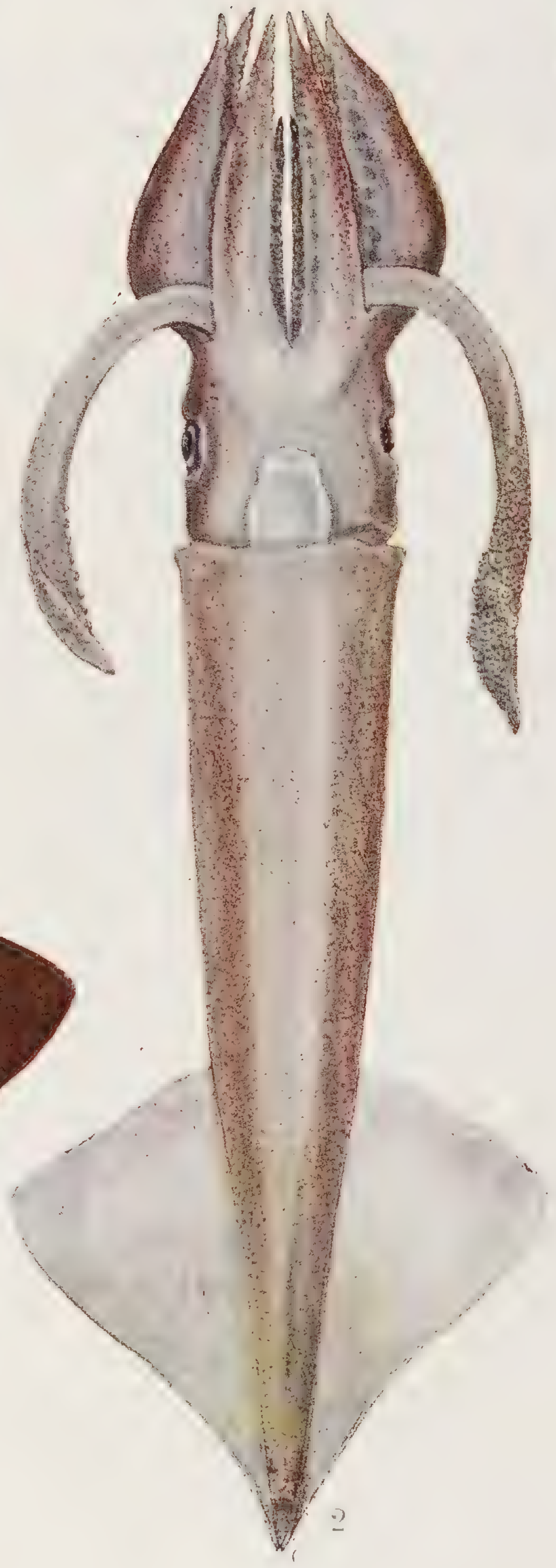
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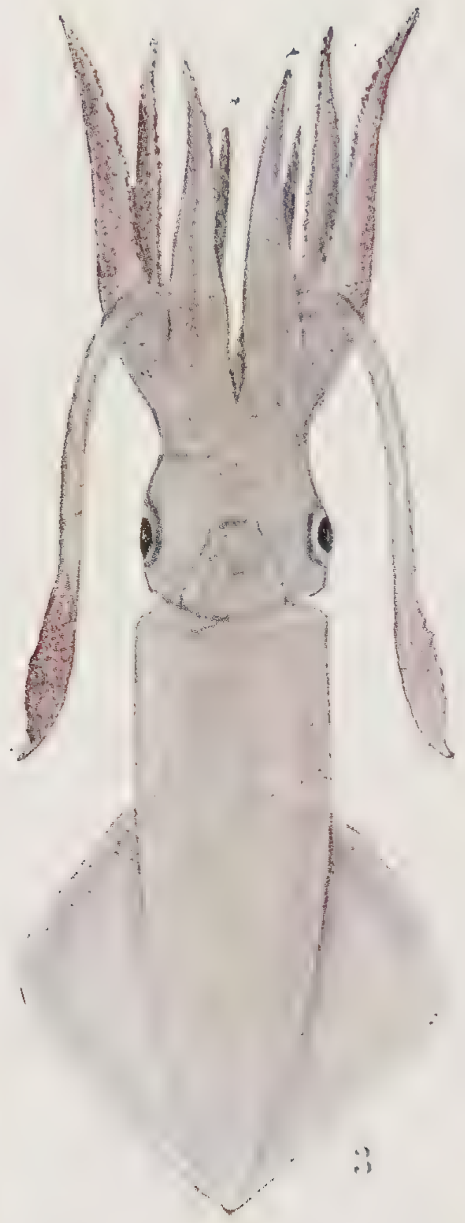
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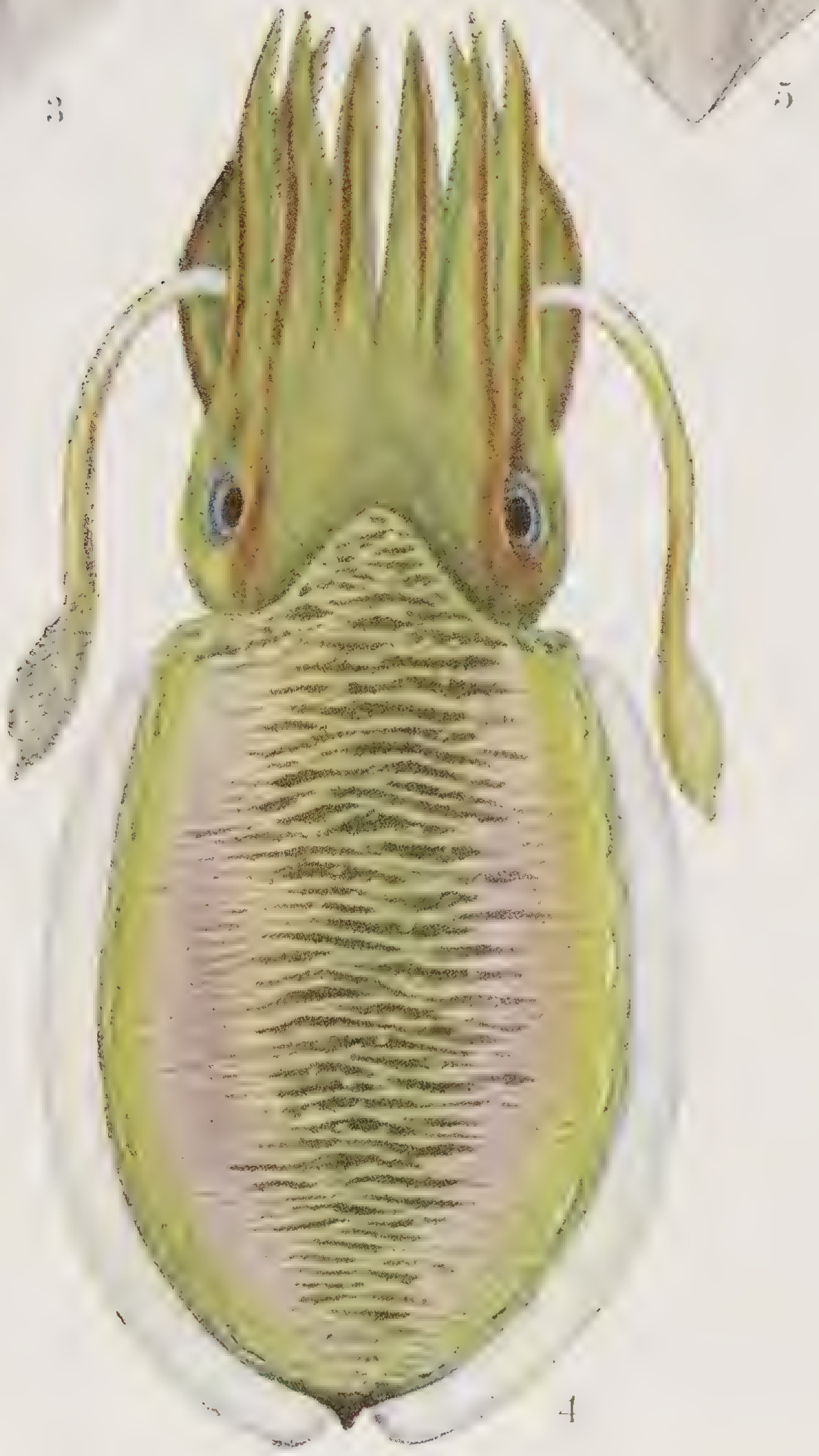
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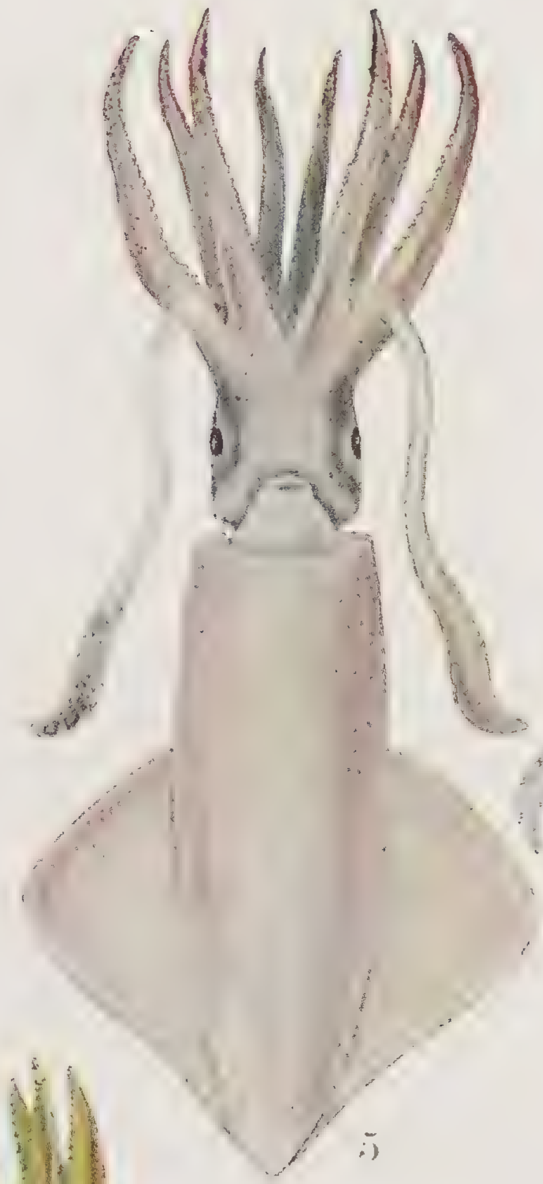
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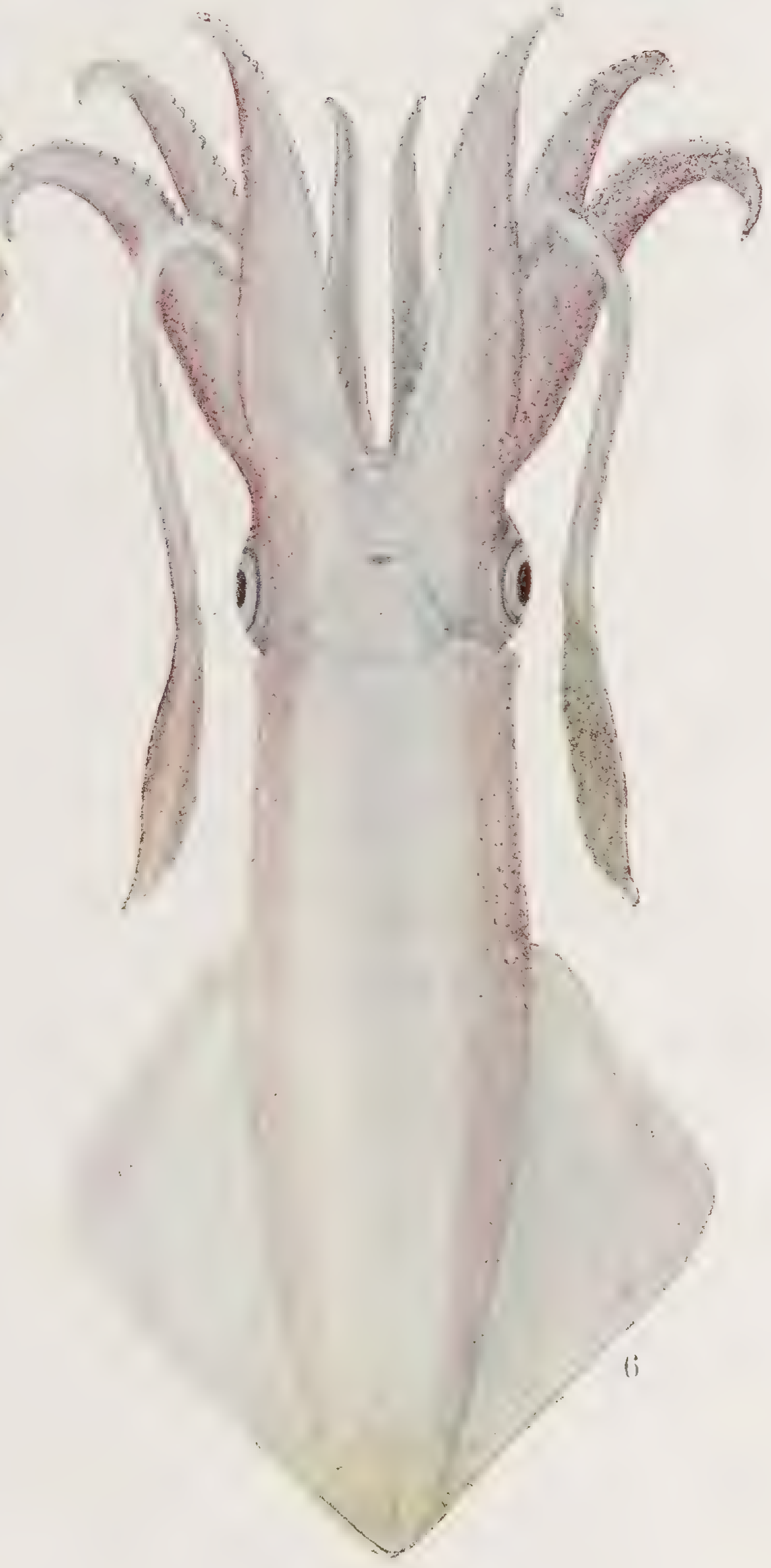
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マダカ

Haliotis gigantea *Gmelin*

（第六十六圖版　第一，一′，一″圖）　×1

本邦産アハビ類中最大形の種類なり．貝殼は楕圓形にして厚く，背面には數多の螺旋條あり． 又螺環縫合線より射出せる波狀の凹凸あり．噴水孔は大にして其壁高く殊に管狀をなす．これ「マダカ」の名ある所以なり．噴水孔の貫通せるものは 3-5 個．殼の表面は淡黃赤色にして內面は銀白色に青綠色を交へ且つ閃光を放つ．最大なるものは殼長 250 粍に達す．

分布廣く，一般に暖流の影響ある所に棲息し，太平洋は九州の南端より福島縣に至り，日本沿岸は秋田と青森の境なる久六島を北の限界とす．産卵期は産地によりて多少の相違あれども普通十一月より一月に至る時期とす．肉は甚だ美味にして，殊に夏期「水貝」と稱し生鮮のまゝ食膳に供へて賞味す．古來此肉を乾燥して明鮑，灰鮑に製し，或は又近來水煮罐詰を造り何れも支那へ輸出する重要水産貿易品なり．

メガヒ

Haliotis gigantea var. sieboldii *Reeve*

（第六十六圖版　第二，二′，二″圖）　×1

貝殼は稍傾斜せる卵圓形にして且つ低く，螺頂は邊緣に位し僅に旋囘す．外面の螺旋條は細くして殆んど一樣なり，噴水孔は「マダカ」のものに比すれば小形にして且つ其壁低し． 噴水孔の貫通せるもの 3-5 個．

外面は黃赤色にして內面は銀白色に淡綠色を交へ閃光を發す． 殼長 210 粍に達す． 分布は前種同樣暖流の洗ふ岬角地方に多く， 太平洋は九州より千葉縣に至り，日本海方面にては秋田縣を北の限界とす．

クロガヒ

Haliotis gigantea var. discus *Reeve*

（第六十六圖版　第三，三′，三″圖）　×1

貝殼稍長楕圓形にして深し．螺頂は貝殼の邊緣に位す．外面の縱溝は分明ならずして寧ろ平面に近く，凹凸極めて少し．噴水孔は「マダカ」のものに比すれば小形にして且低し．孔數は 3-5 個あり．生貝の脚裏の色は多く綠灰色なるを以て「クロガヒ」と稱するなり．表面は赤褐色にして微かに赤色又は綠色の放射線を現出す．大なるものにありては殼長 210 粍に達す．

日本海及太平洋の兩沿岸に分布し，日本海にては青森縣久六島を又太平洋にては宮城縣金華山島を北の限界とす．

ミヽガヒ

Haliotis asinina *Linné*

（第六十六圖版　第四圖）　×1

貝殼は長楕圓形にして耳形を呈し，後部稍彎曲し且つ尖銳となる．螺頂は邊緣にあり．又貝の後部には螺頂より放射する不分明なる縱溝を有す．噴水孔は小く楕圓形にして，貫通せるもの 5-7 個あり． 殼表は橄欖色の地に褐色の數多の斑紋ありて美麗なり．又螺頂に近き所にはV字形をなせる赤黃色の條紋あり．殼の內面は銀白色を帶び閃色を放つ．殼長 85 粍に達す．沖繩諸島及鹿兒島縣奄美大島に産す．

トコブシ

Haliotis japonica *Reeve*

（第六十六圖版　第五圖）　×1

貝殼の形狀は長楕圓形にして「アハビ」に比すれば幅狹く且つ低し．殼外面の螺旋條は一樣に細小なり．又襞褶は薄層を呈す．噴水孔は小にして其壁低く其貫通せるもの 6-9 個あり．殼の表面は淡黃，綠褐及青綠等種々の色彩ある斑紋を呈す．最大 95 粍の殼長を有す．

分布廣く太平洋岸は千葉縣犬吠岬地方を日本海方面にては秋田縣を北の限界とす．

Haliotis gigantea *Gmelin*

"Madaka," "Matagai"

Pl. LXVI, fig. 1, 1′, 1″.　×1

The largest species of *Haliotis* from the coast of Japan; shell ovate, thick, spirally ribbed, ribs small, sometimes somewhat obsolete, obliquely nodosely waved; holes large, peculiarly tubular, three to five open.

Exterior colour fawn red, interior iridescent with white and pale green. Largest specimens measure 250 mm. in length. Found in the warm current of Japanese waters, both in the Pacific as well as in the Japan Sea. Northern limits of distribution are ca. 36°N. latitude in the former and ca. 40°N. latitude in the latter. Spawning takes place during the period from November to January; tastes delicious. An economically important mollusk in Japan, being exported to China as dried and canned goods.

Haliotis gigantea var. sieboldii *Reeve*

"Megai"

Pl. LXVI, fig. 2, 2′, 2″.　×1

Shell somewhat obliquely ovate, rather flatly convex, apex terminal, scarcely spiral; radiately ridged, ridges obtuse, rather distant; holes smaller and less conspicuously tubular than the former species, three to five open.

Exterior orange-red, interior white and pale green, iridescent. It attains to 210 mm. in length. Inhabits the coast of both sides of Japan. Distribution of this species extends from the south to about 35° N. latitude.

Haliotis gigantea var. discus *Reeve*

"Kurogai"

Pl. LXVI, fig. 3, 3′, 3″.　×1

Shell somewhat elongately ovate, elevately convex, apex terminal, ridges obtuse, rather plain, not so waved; holes smaller and less conspicuously tubular than *H. gigantea*, three to five open. The colour of the foot of living specimen is greenish-gray.

Exterior chestnut brown, faintly radiated with red or green. It grows to 210 mm. in length. Widely distributed, being found along both coasts of the Pacific Ocean and the Japan Sea. Northern limits of distribution are Kinkwazan, Miyagi Prefecture in the former and Kyuroku Island in the latter.

Haliotis asinina *Linné*

"Mimi-gai"

Pl. LXVI, fig. 4.　×1

Shell elongately ovate, slightly curved, posteriorly flexuously acuminated, spire terminal; posterior portion of the shell with fine rather distant ridges radiating from apex; holes rather small, five to seven open.

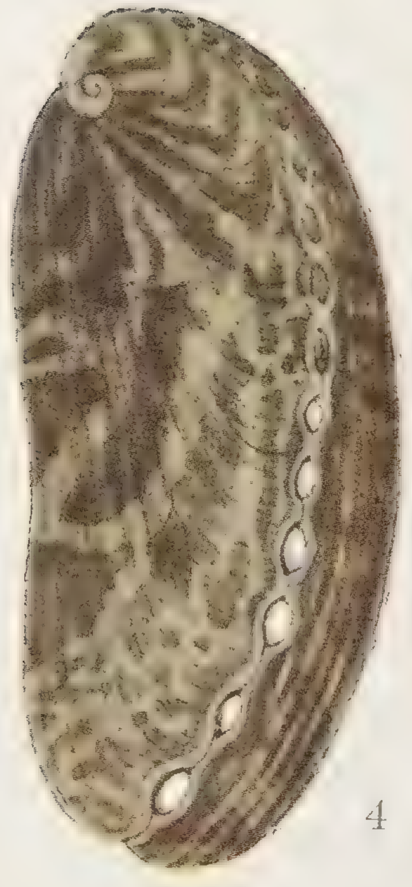
Exterior olive green, beautifully variegated with numerous short interrupted brown lines, and painted with alternate green and reddish yellow zigzag rays next to the apex; interior silver white and iridescent. It attains to 85 mm. in length. Inhabits the warm current of southern Japan, especially in Ryu-Kyu Islands and Amami-Ôsima of Kagosima Prefecture.

Haliotis japonica *Reeve*

"Tokobusi"

Pl. LXVI, fig. 5.　×1

Shell small, ovately oblong, rather flatly convex, spirally corded with fine equal ridges, plaits conspicuous, lamella like, irregular; holes small, less conspicuously tubular, six to nine open. Interior colour beautifully variegated with yellow, olive-brown and green. Reaches 95 mm. in length. Widely distributed along both coasts of the Pacific Ocean and the Japan Sea. The northern limits of range are ca. 35°N. latitude in the former and ca. 40°N. latitude in the latter.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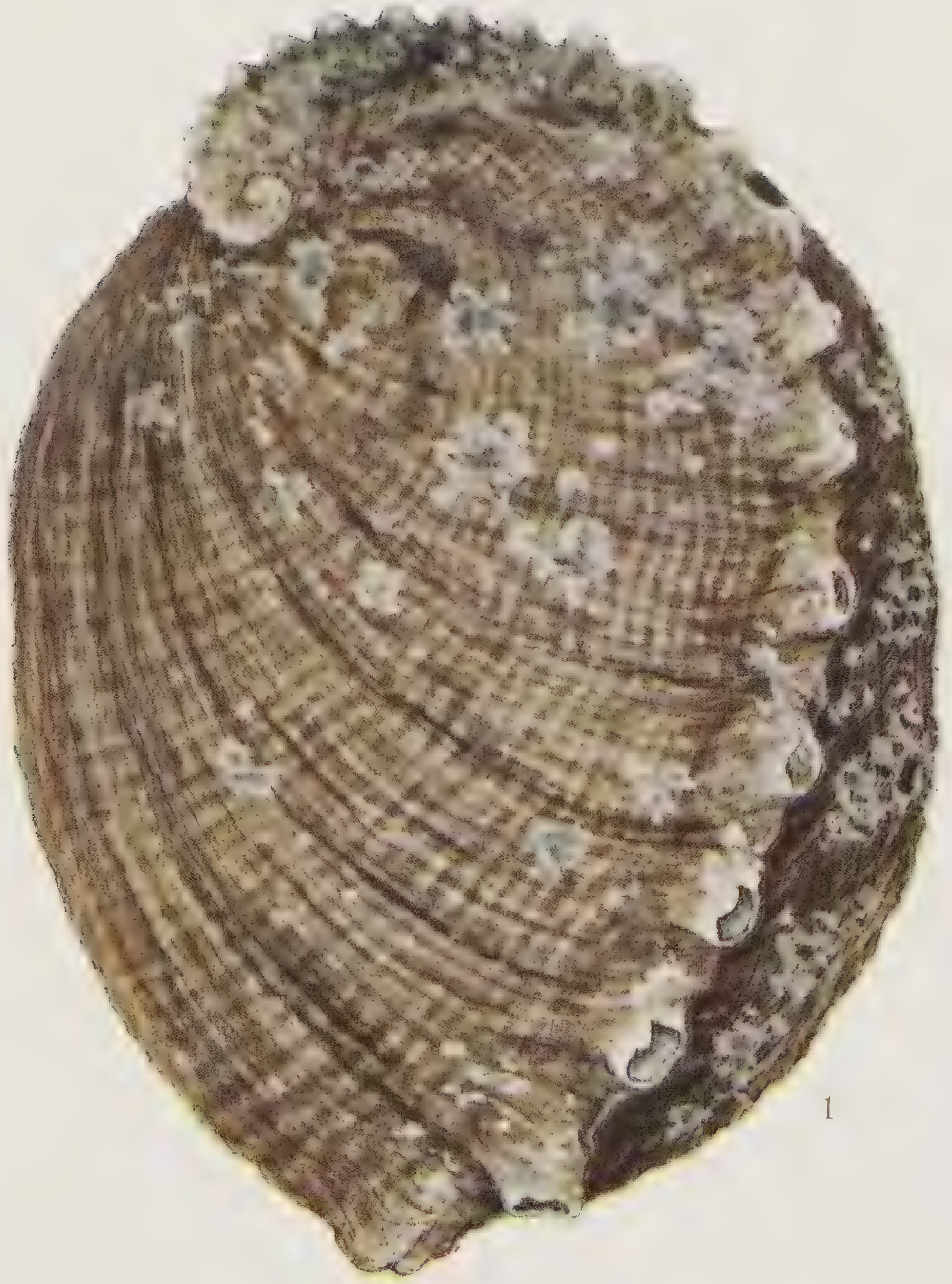
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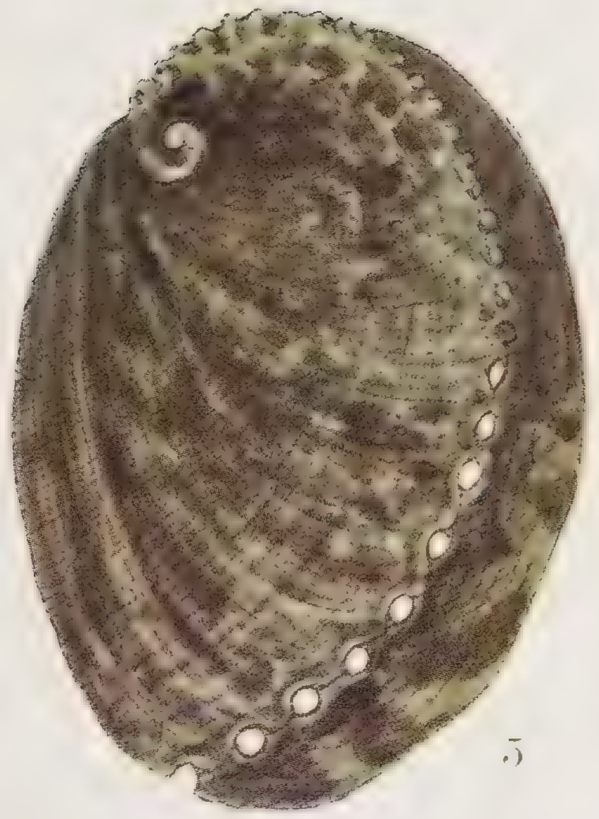
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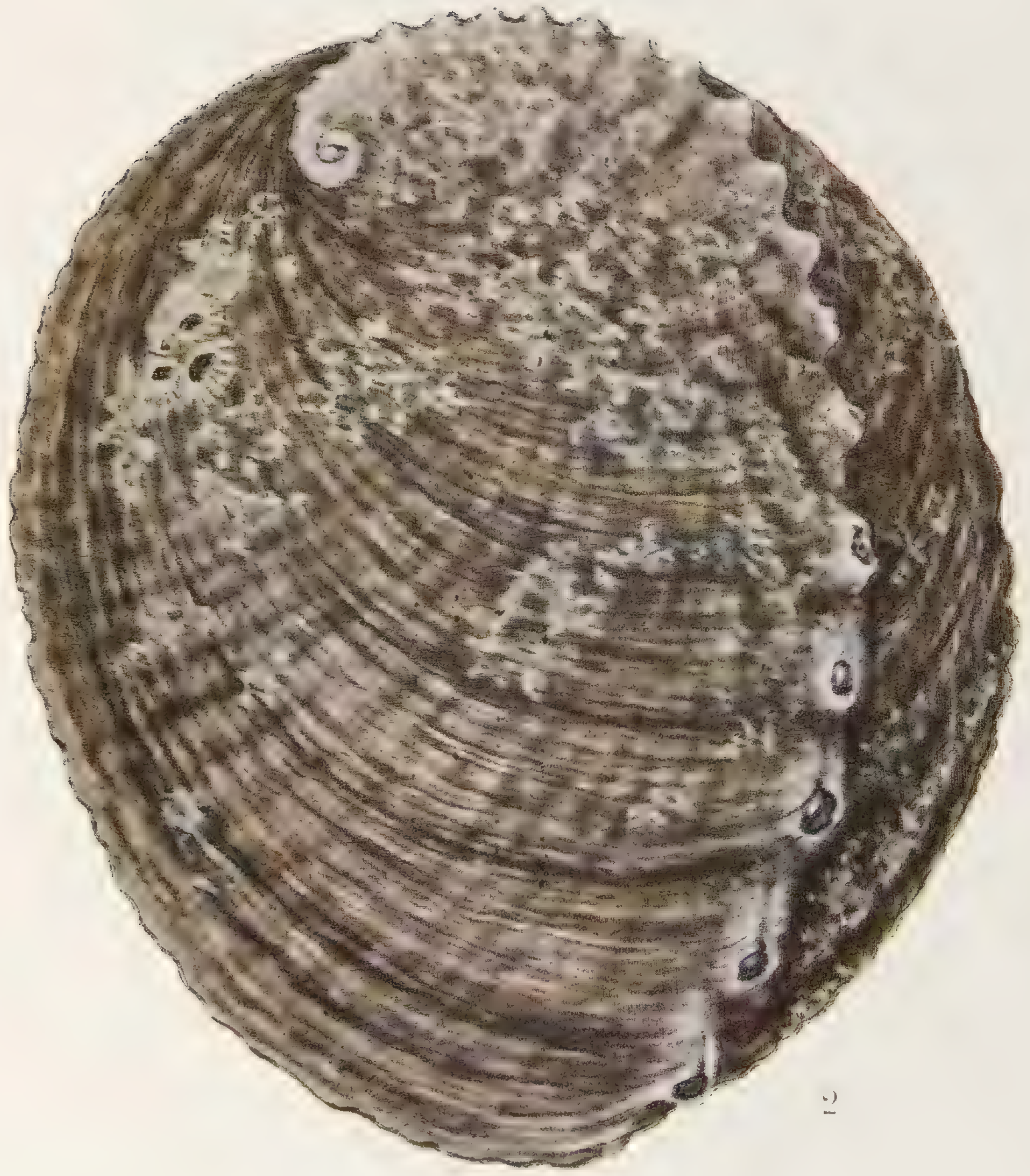
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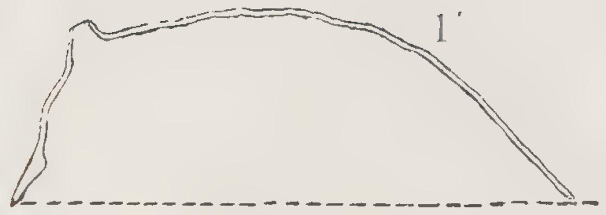
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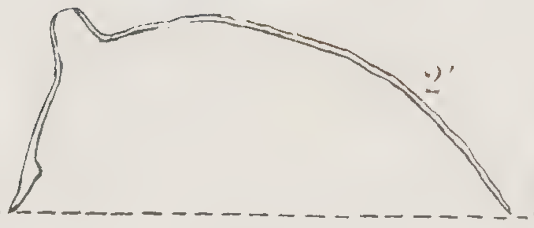
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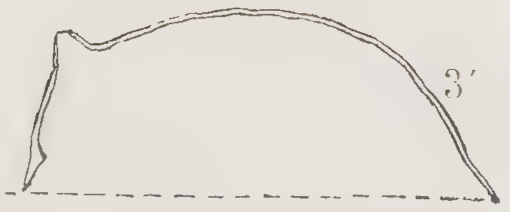
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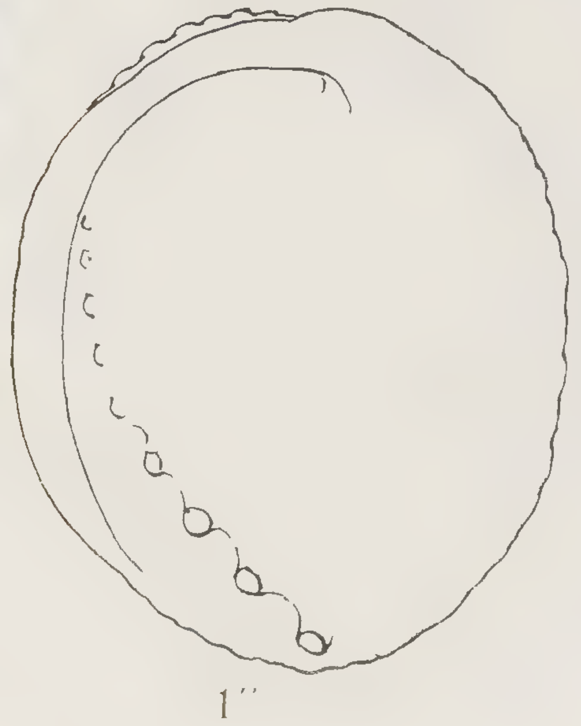
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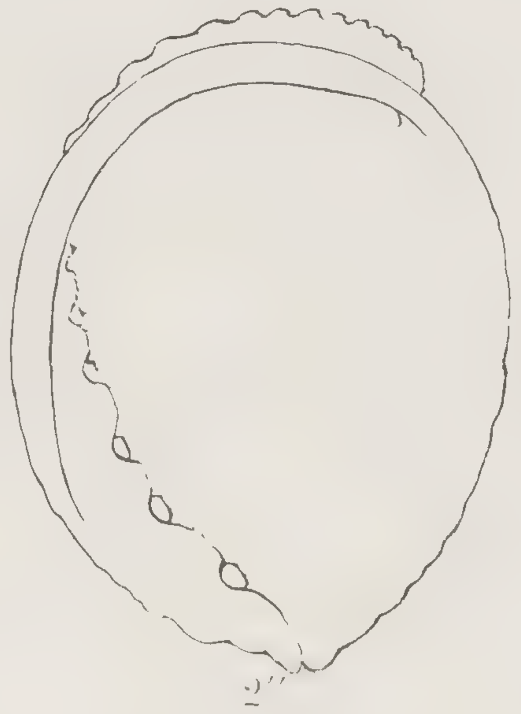
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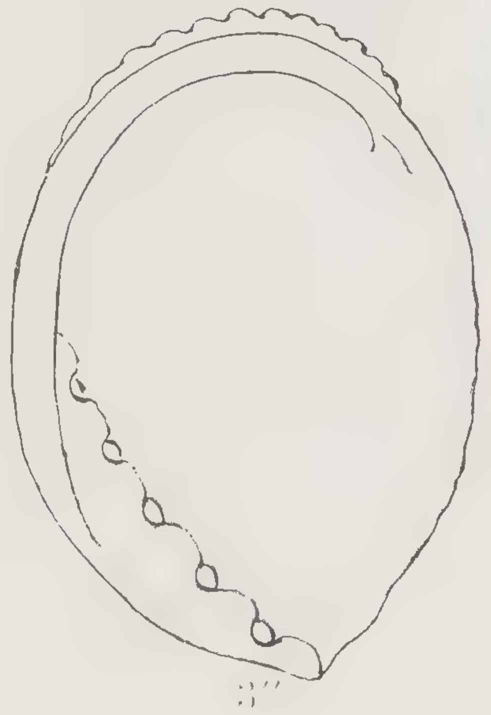
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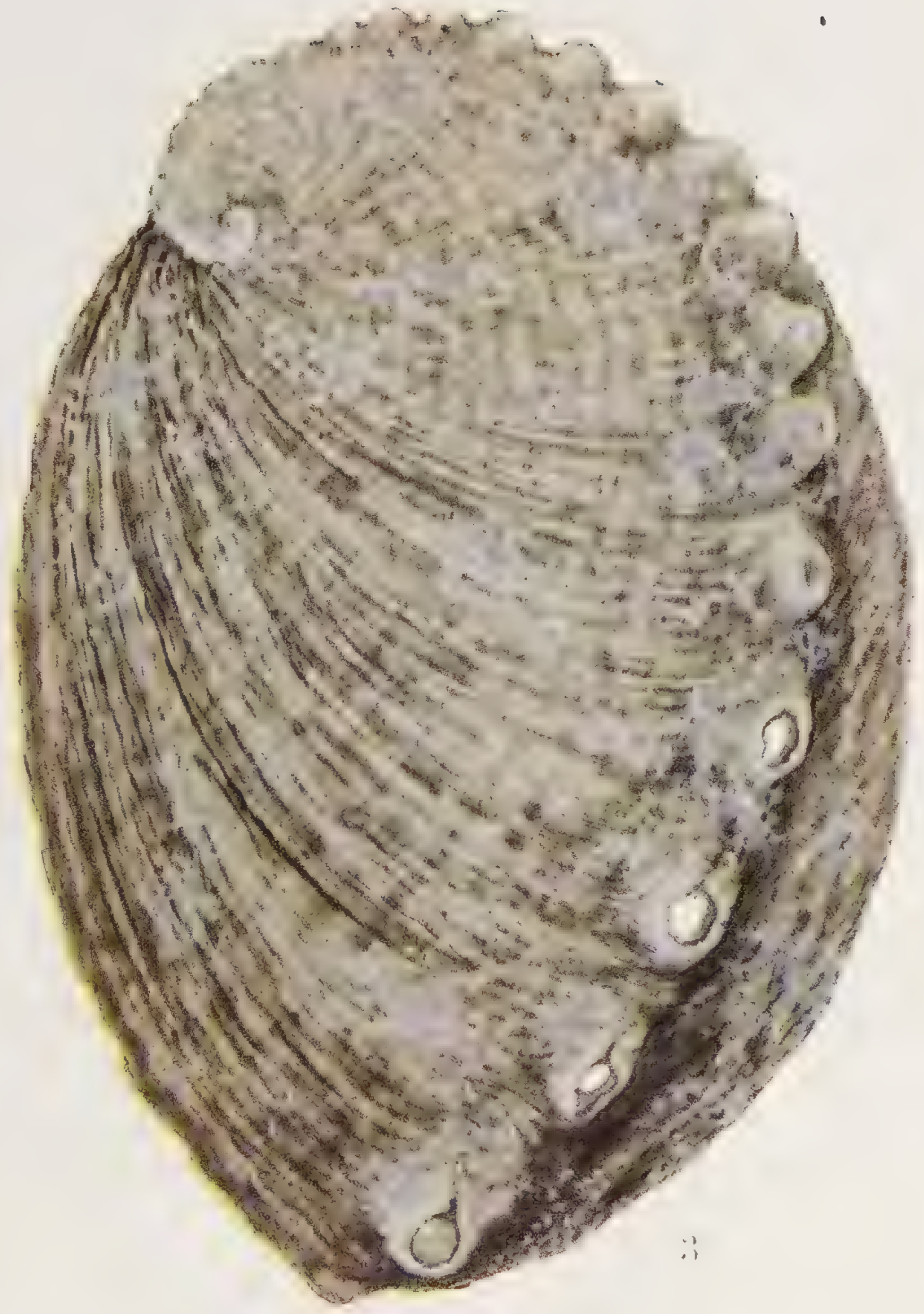
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ヨメガカサ

Cellana treuma (*Reeve*)
(第六十七圖版　第一, 二, 三圖)　×1

貝殼は小形扁平にして略卵圓板狀を呈す. 殼頂は貝殼の前方に近く存在し, 放射肋は微細無數なり. 淡碧色の地に鏽褐色の斑紋を雜ふ. 殼の内面は美しき肉色を呈し, 黑雲母狀の光澤ある放射的縱條を有す.

殼長 40-50 粍位を普通とし本邦到る所の沿岸岩礁に着生せり.

マツバガヒ

Cellana niglolineata (*Reeve*)
(第六十七圖版　第四, 五, 六圖)　×1

「ヨメガカサ」よりも稍大形にして高く, 汚淡碧色の地に鏽褐色の多數の放射脈を有す. 裏面より透し見る時は鼈甲様の彩色を呈す. 殼の内面中央の馬蹄形肉痕は美しき朱色を呈す.

殼長 70 粍位. 一名「ウシノツメ」と稱し廣く分布す.

カサガヒ

Cellana nigrisquamata (*Reeve*)
(第六十七圖版　第七, 八, 九圖)　×1

大形にして高く陣笠形をなし, 殼頂は略中央に位す. 大小の放射肋は結節狀を呈し, 約 46–51 條を數ふ. 殼表は淡褐色にして, 殼の内面は橙色を生じ筋痕外部は雲母狀の光澤を有す. 窩心部は淡褐色なり. 内側歯 1 個を有す.

殼長 80 粍内外. 小笠原島に產す.

クマノコガヒ

Tegula (Chlorostoma) xanthostigma (*A. Adams*)
(第六十七圖版　第十, 十一圖)　×1

貝殼は鈍圓錐形をなし, 螺層は約 5–6 を數ふ. 殼表には放射的の彫刻細かく, 滑かにして殼地は黑し. 臍部は鮮緑色を呈し. 臍孔を缺く. 殼口は大にして卵形を呈す.

直徑 40 粍位. 殆んど全國に分布するも中部淺海に多し. 漁村にては食用とす.

ウノアシ

Patelloida saccharina (*Linné*)
(第六十七圖版　第十二, 十三, 十四圖)　×1

貝殼は低圓錐形にして殼質堅固なり. 殼頂は中央より稍前方に位し殼頂を中心に 7 條内外の大なる放射肋を有し鵞鳥の蹼足狀を呈す. 全く殼の内面は白く, 窩心部及周縁は黑褐色を呈す. 歯舌は一般に中歯を缺く.

殼長 40 粍位. 分布甚だ廣く本邦各地に產し海岸近き岩礁に着生す.

サラサバテイ

Trochus niloticus *Linné*
(第六十七圖版　第十五, 十六圖)　×1

殼質重厚にして正圓錐形をなし螺塔高く其輪廓は殆んど直線をなし, 8–9 階の螺層を有す. 體層は基底に於て扁平なり. 後生層以上の各層表面には 1 列の鈍き結節を有す. 殼表は淡褐色の硬き殼皮を被り, 白地に暗紅色の斜縱斑を飾り, 底面にありては該斑紋は鮮紅色の火焰狀を呈し, 極めて美麗なり. 底面は殆んど平坦にして中央に擬臍を有す. 軸唇に 2 襞を具へ眞珠光澤を有す. 蓋は圓形角質にして約 10 螺旋を有し淡褐色なり.

直徑 100 粍 高 80 粍位. 本邦南方暖海に產し一名「高瀨貝」と稱せられ, 眞珠質厚きを以て多く釦紐, 貝細工等に使用せらる.

ベニシリダカ

Trochus conus hirasei *Pilsbry*
(第六十七圖版　第十七, 十八圖)　×1

正圓錐形の卷貝にして, 螺層は約 9 を數へ, 各螺層は顆粒狀を呈し, 螺層の縫合に近く 1 列の稍大なる結節狀のものあり. 殼表は淡紅色にして鮮紅色の斜縱斑を飾り, 殊に體層に於ては火焰狀の赤色斑顯著なり. 殼の底面中央に擬臍を有し軸唇は襞を具ふ. 殼口内は軸唇と共に眞珠色を呈す.

殼の直徑 60 粍, 高さ 55 粍に達し, 本邦中部及南海に產す.

Cellana toreuma (*Reeve*)

"Yomegakasa."
Pl. LXVII, figs. 1, 2, 3.　×1

Shell oblong ovate, slightly atenuated in front, very depressed, apex very anterior, densely radiately ridged, ridges alternately larger, subcrenated; greenish or yellowish, radiately variegated and dotted with purple and opaque-white, interior more or less iridescent white, subtransparent. Shell measuring about 50 mm. in length. Commonly occurs in central and southern Japan.

Cellana nigrolineata (*Reeve*)

"Matuba-gai." "Usinotume."
Pl. LXVII, figs. 4, 5, 6.　×1

Shell rather oblong-ovate, slightly attenuated and much inclined anteriorly, thinnish, rather depressed, radiately ridged, ridges obtuse, rather distant, the alternate ones terminating about the middle; cinder black, pale at the apex, ridges deep black, interior blackish-blue, nucleus burnt-brown. Shell measuring about 70 mm. in length. Inhabiting rocky shores of warmer parts of Japan.

Cellana nigrisquamata (*Reeve*)

"Kasa-gai."
Pl. LXVII, figs. 7, 8, 9.　×1

Shell somewhat orbicularly ovate, moderately convex, radiately ribbed and striated, ribs in the young shell crenulated, twelve broader and larger; yellowish, variegated with black, the colours fading with age, interior deep black brown near the margin, then bronze-chestnut, then light opaque-blue, with brownish yolk nucleus.

Shell measuring about 80 mm. in length. Commonly occurs in warmer parts of Japan on rocky shores.

Tegula (Chlorostoma) xanthostigma (*A. Adams*)

"Kumanoko-gai."
Pl. LXVII, figs. 10, 11.　×1

Shell solid, conical, rather inflated, whorls rounded; apex not pointed, suture line distinct; surface of shell very smooth, no ribs, covered with black epidermis. Umbrical aperture closed and stained with very nice green colour. It grows 40 mm. in height. Widely distributed in all coasts of Japan.

Patelloida saccharina (*Linné*)

"Unoasi."
Pl. LXVII, figs. 12, 13, 14.　×1

Shell ovate sharply angularly convex, rather thick, radiately ribbed, ribs strong, compressed, various, generally seven principal ones, interstices radiately ridged; white more or less thickly painted between the ribs, with curved black blotches, interior white, black-edged.

Shell measuring about 40 mm. in length. Commonly occurs in warmer parts of Japan, on tidal rocky shores.

Trochus niloticus *Linné*

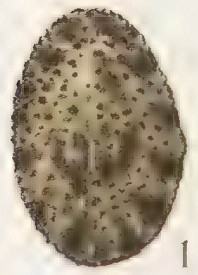
"Sarasabatei" "Takasegai"
Pl. LXVII, figs. 15, 16.　×1

Shell pyramidally conical, sometimes thickly dilated at the base, rather superficially excavately umbilicated, rose white, radiately flamed with black blood-colour, whorls flatly sloping, obliquely sparingly grained, plicately tubercled at the lower margin, grains and tubercles obsolete in the last whorl, base concavely flattened, circularly finely ridged, spotted and flamed with blood-rose.

Trochus conus hirasei *Pilsbry*

"Benisiridaka."
Pl. LXVII, figs. 17, 18.　×1

Shell rather obscurely imbilicated, pyramidal, sometimes angled, sometimes rounded at the base, white obliquely largely flamed with crimson red; whorls transversely grained in rows, grains oblique, rather papillose, irregular; base striately impressed, intermediate ridges rather flat, filled with deep crimson-red, columella callous, slightly twisted.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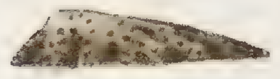
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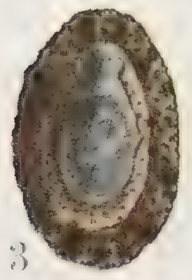
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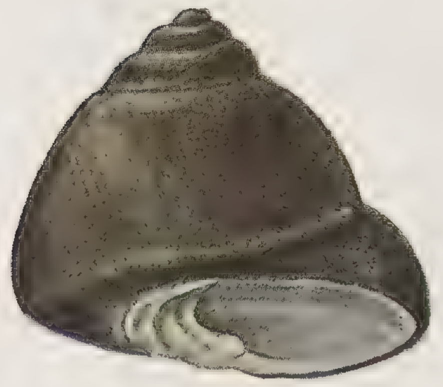
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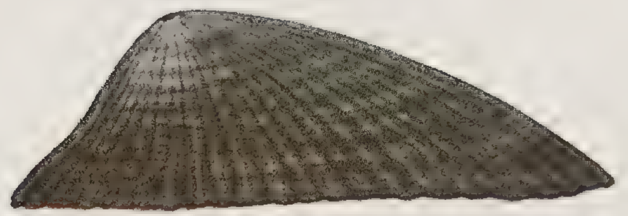
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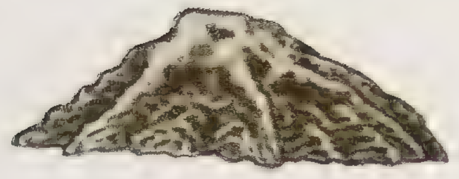
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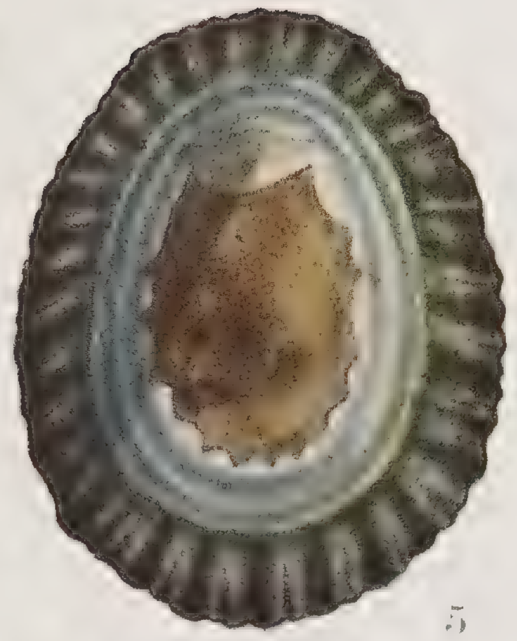
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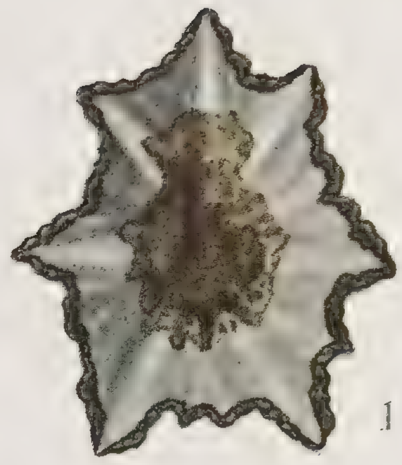
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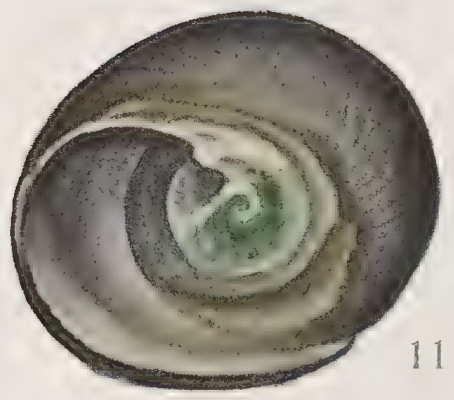
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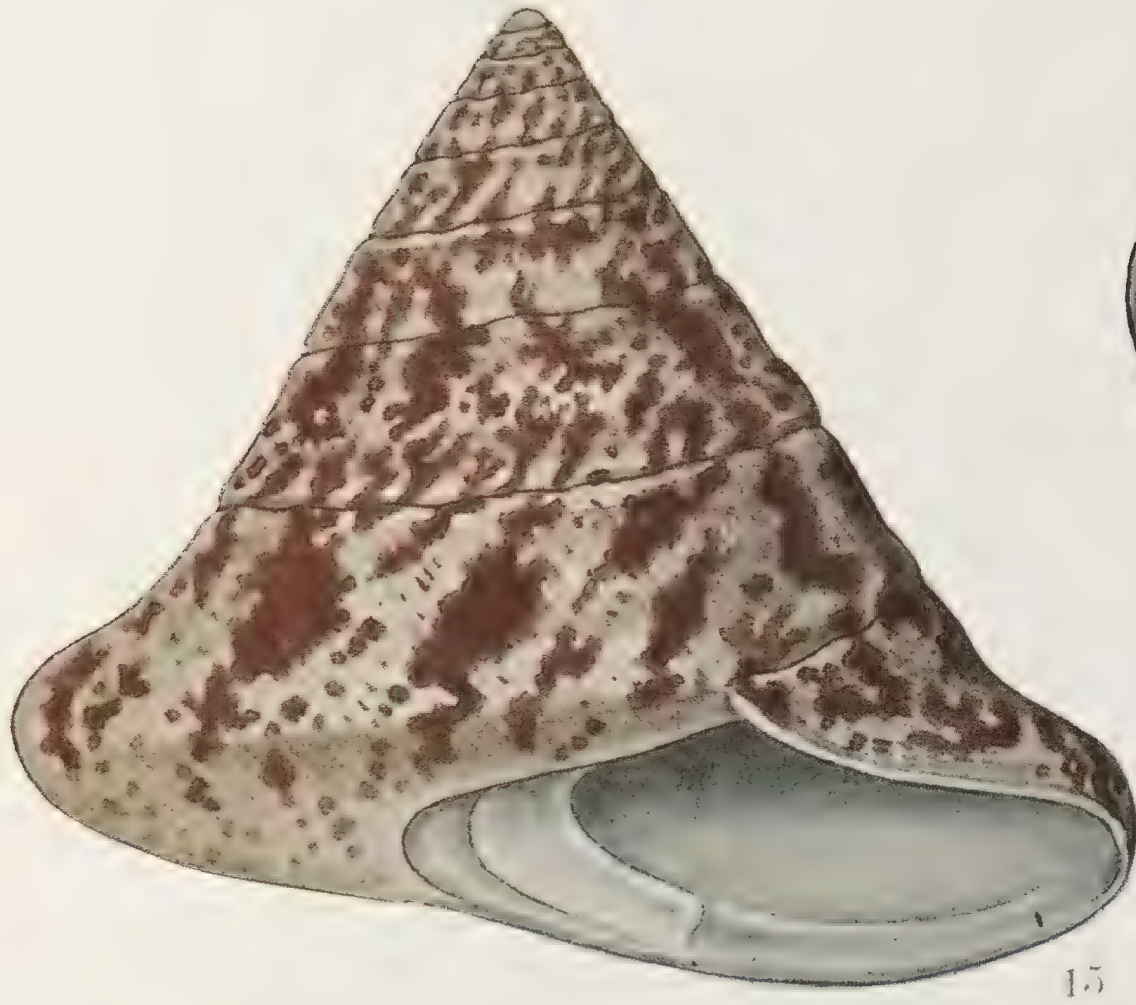
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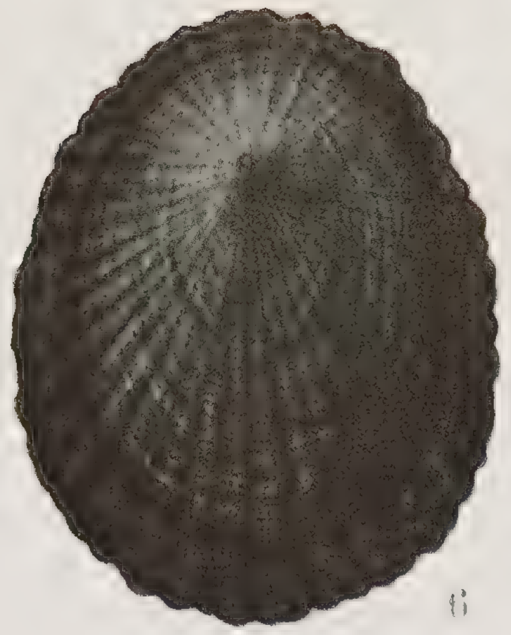
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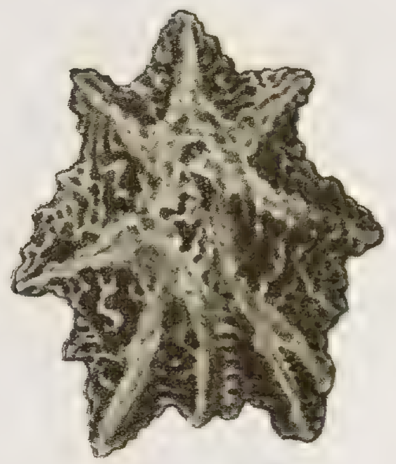
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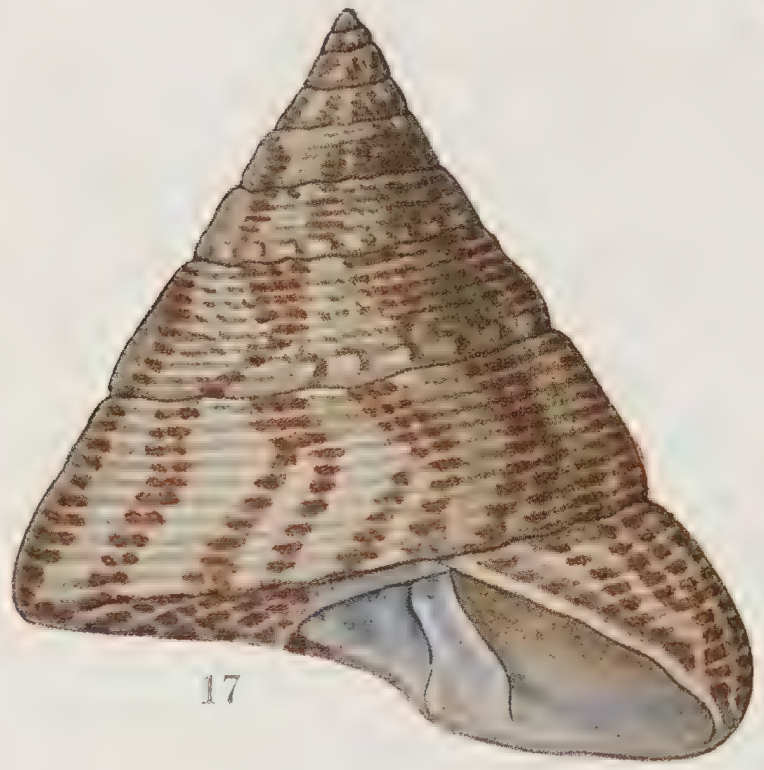
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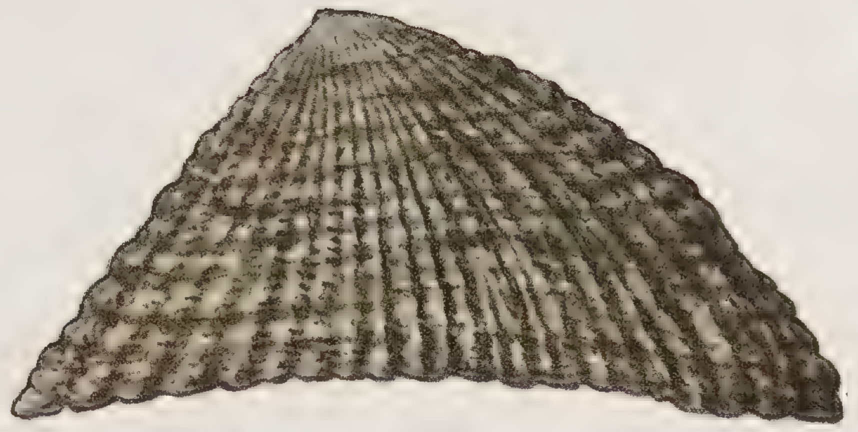
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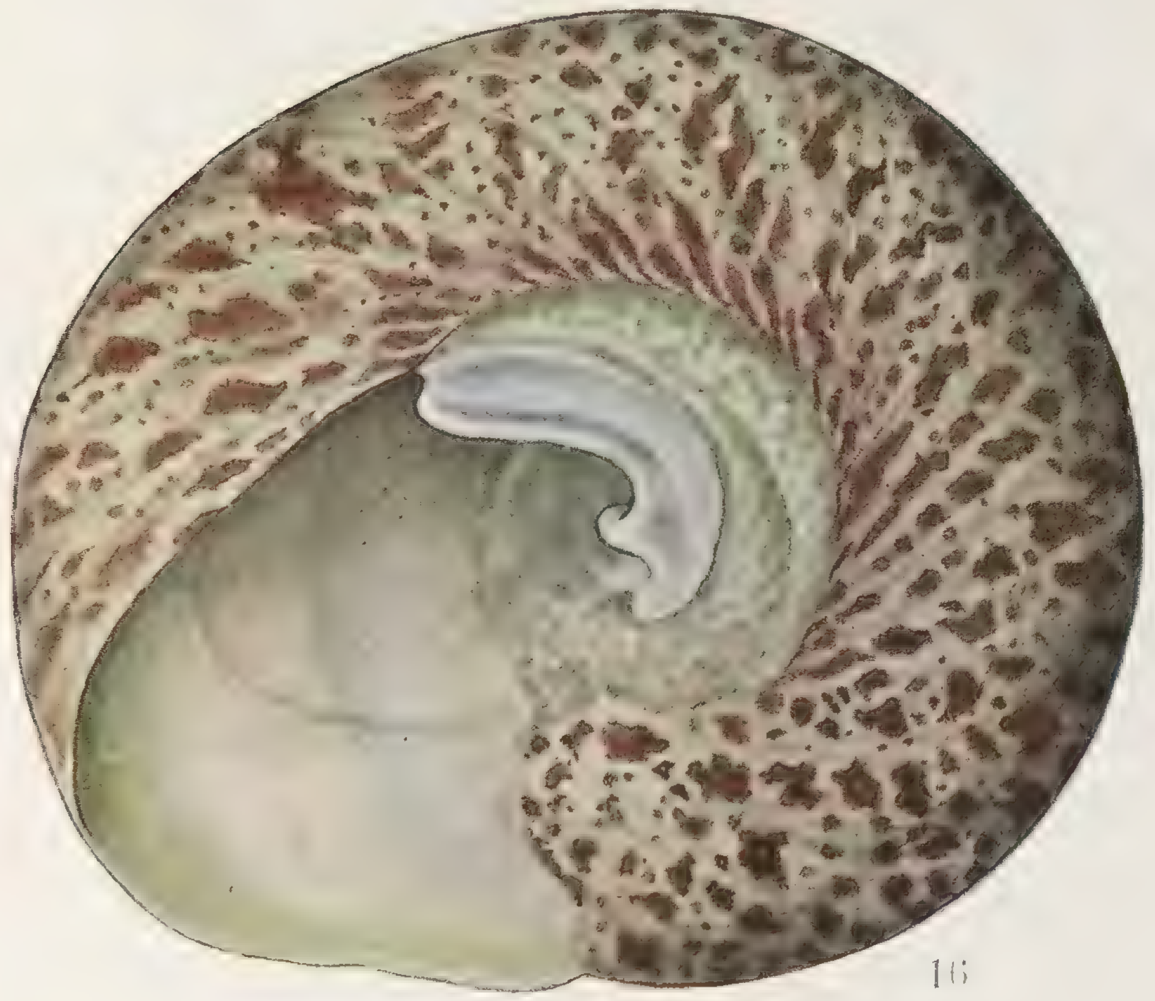
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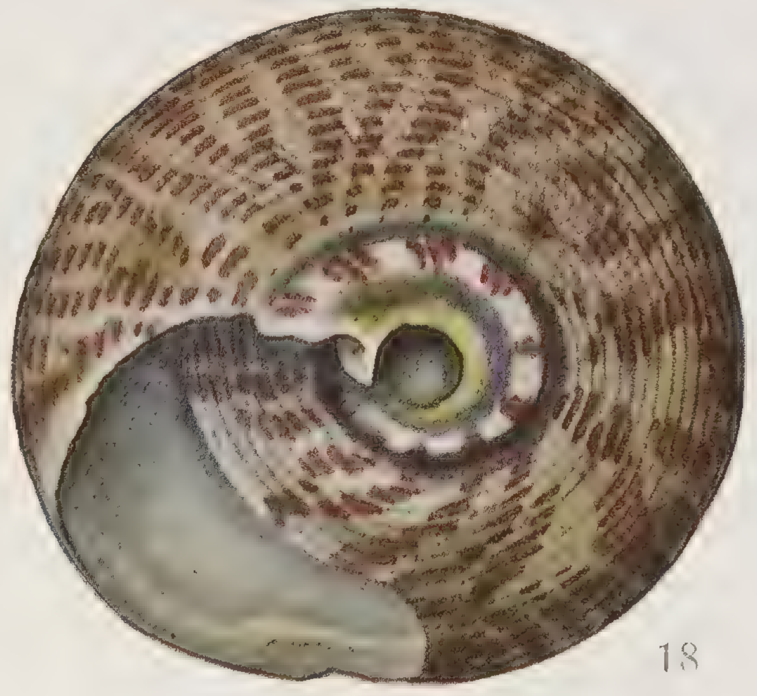
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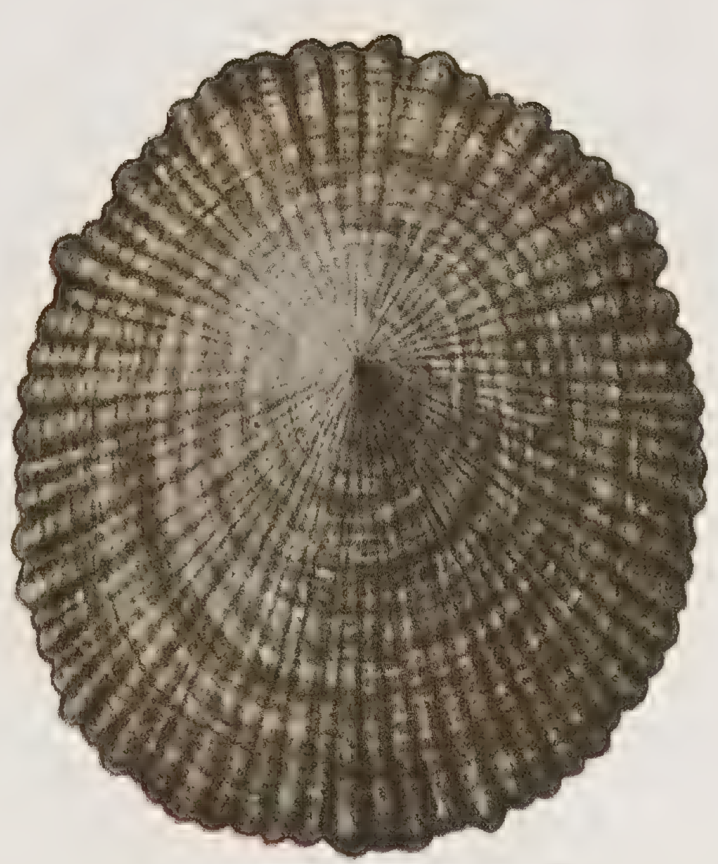
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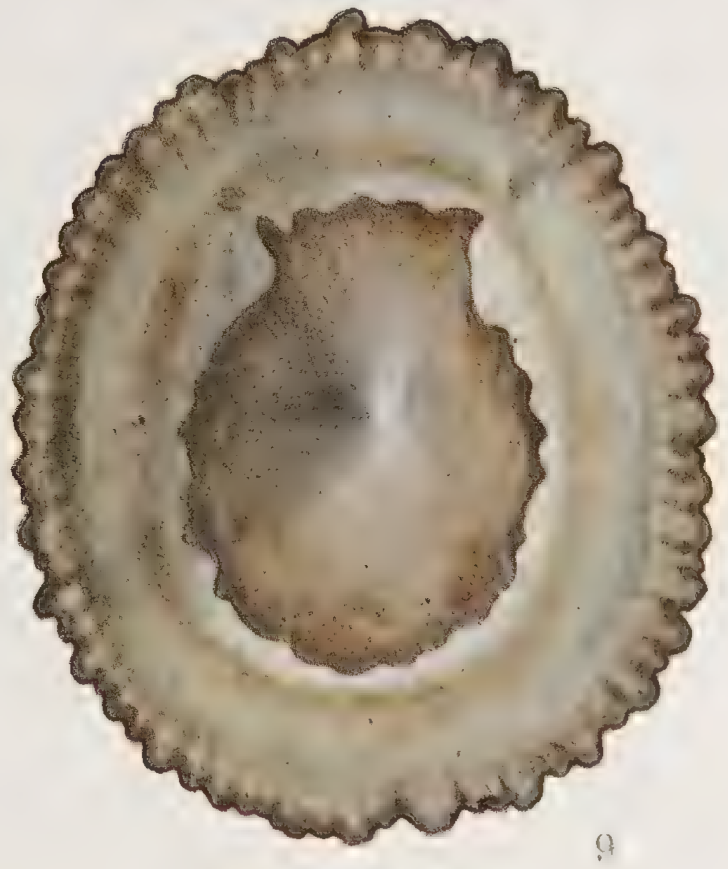
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シラタマツバキ

Polinices sagamiensis *Pilsbry*

（第六十八圖版　第一, 二, 三圖）　×1

殆んど球形の卷貝にして「ツメタガヒ」に甚だ類似すれども, 螺塔前者よりも稍扁平となり, 殼口少しく長し. 殼は淡黃褐色にして白色帶を交ゆる點に於て異れり.

ツメタガヒ同樣干潮線附近の砂泥地に棲息し他の二枚貝等の害敵なり. 殼長 50 粍となり, 普通に產すれども前者より多からず.

ツメタガヒ

Polinices didyma (*Bollen*)

（第六十八圖版　第四, 五, 六圖）　×1

稍球形の卷貝にして大形なるものは直徑 100 粍に及ぶ. 螺塔低く螺層は凡 5 階よりなり, 胎殼は甚だ小さし. 殼質重厚にして, 生長線は明瞭に現る. 殼口は半月形を呈し甚だ大なり. 內脣の滑層部は濃褐色にして, 大なる臍孔を覆ふ. 厴は角質扁平なり. 殼色は黃褐色或は褐色にして下方臍孔附近は白色を呈す.

全國到る所, 砂泥質の沿岸に棲息し, 干潮面附近より 5 米位の海底に迄分布す. 足は非常に大きく常時は外套膜にて殼面を覆ひて運動し, 薄弱なる二枚貝等をこの大なる足にて把握窒息せしめ同時に酸液を分泌し殼頂附近に穴をあけ遂に殺害す. 故に淺海の「アサリ」.「ハマグリ」等の養殖場の害敵なり. この卵塊は「砂茶碗」と稱せられ, 砂上に帶狀に卷かれた砂粒と卵の塊りとなりて屢々之を見る.

肉は食用に供すれども, 硬く美味ならず.

ダンベイキサゴ

Umbonium giganteum (*Lesson*)

（第六十八圖版　第七, 八, 九圖）　×1

「キサゴ」類中の大形になる種類にして直徑 40 粍高さ 25粍位に生育す. 螺塔稍高く, 螺層の數は凡 7 位, 螺層縫合の直下は凹めり. 表面は頗る滑かにして淡褐色の地に黑色或は暗褐色の模樣あり. 滑層は可成廣く多少赤味を帶べり. 本邦特產にして太平洋暖海地方の淺海に棲息す. 最も普通に產し, 大きさ直徑 14 粍位, 小兒の玩具用とされる「キサゴ」は小形なる他種にして Umbonium costatum *Kiener* なり.

ヤクワウガヒ

Turbo marmoratus *Linné*

（第六十八圖版　第十圖）　×1

形態「サザエ」に似たれども甚だ大形にして, 高さ, 直徑共約 180 粍あり. 殼質頗る重厚, 體層大きく, 螺層は 6-7 位にて螺塔は凸隆せり. 體層の周緣に鈍き結節を備ふる 3 條の螺肋あり. 螺表は幼時美麗な青綠色を呈し栗色帶を有するが大形なるものは汚灰色となる. 然し表面を磨く時は美麗なる色彩出す. 殼口は大なる圓形にして, 美しき眞珠光澤を有せり. 厴は石灰質にして重厚なり.

本邦の暖海地方, 琉球, 臺灣殊に紅頭嶼に產す. 貝殼は美麗なる眞珠光澤を有するを以て貝釦其他種々の器具に用ひらる.

リウテン

Turbo petholatus *Linné*

（第六十八圖版　第十一圖）　×1

螺表は甚だ平滑にして光澤に富み, 美麗なる色彩を有す. 卽淡黃乃至栗色の地に濃淡の模樣を交へ更に濃淡の交互する廣狹數條の螺帶をなせり. 殼質厚く螺層は脹れ, 螺塔稍高し. 厴は外面膨る. 中央に美しき綠色核あり外側半圓は茶褐色にて顆粒狀をなす. 內面は扁平, 褐色にして夜光貝と同樣左卷なり. 殼高, 殼徑とも 70 粍位あり. 前種同樣暖海の岩礁間に棲息す.

サザエ

Turbo cornutus *Solander*

（第六十八圖版　第十二圖）　×1

最も普通に知られたる貝殼にして, 大なるは 100 粍以上の高さあり. 殼質重厚にして螺層の周緣には 2 列の管狀突起あるを普通とすれども又全くなきものあり. 殼表は多く他の生物附着する爲, 暗青或は暗褐色を呈せり. 殼口圓く內面眞珠光澤を呈するを以て貝釦, 其他に用ひらる. 厴は石灰質にて厚く外面は螺旋狀肋をなし疣狀顆粒あり.

日本全國に分布し, 外海に面する岩礁の, 干潮線より深さ約 10 米の海底まで棲息し,「カジメ」等の海藻を常食とす. 肉は美味, 各地に壺燒として著名なり.

Polinices sagamiensis *Pilsbry*

"Siratamatubaki"

Pl. LXVIII, figs. 1, 2, 3.　×1

This species much resembles the following species *Polinices didyma* Bolten, but differs in shape and colour.

Shell a little flatly spirally, whorls obliquely long; colour whitish with light flesh colour longitudinal streaks Inhabits shallow sandy bottoms, distributed throughout central and southern Japan.

Shell attains to 50 mm. in diametre. Not so common as the following species.

Polinices didyma (*Bolten*)

"Tumeta-gai"

Pl. LXVIII, figs. 4, 5, 6.　×1

Depressed globose, indistinctly spirally engraved, a little depressed below the suture; umbilicus very wide, spirally striate, and usually two or three ridged, umbilical callus transversely deeply grooved in the middle, reflected over the upper portion of the umbilicus.

Colour light flesh or yellowish brown, interior and callus light chocolate.

Commonly occurs in all Japan; inhabits shallow sandy bottom.

Umbonium giganteum (*Lesson*)

"Danbeikisago"

Pl. LXVIII, figs. 7, 8, 9.　×1

Shell rather high, conical above, rather flattened below; above the middle, thinly spirally striated grey, ornamented with large oblique black spots at the suture and at the angle, or grey without spots; whorls near the suture deep; callus irregular, pink, angularly tumid behind the columella; collumella very thick, broad; outer lip produced and depressed above.

Shell attains a length of 40 mm. in diametre, 25 mm. in height; commonly occurs in tidal shores of central Japan.

Turbo marmoratus *Linné*

"Yakógai"

Pl. LXVIII, figs. 10.　×1

Shell imperforated, somewhat orbicular, very ventricose, whorls smooth, or concentrically striated, depressly concave round the upper part, encircled beneath the two or three keels or rows of nodules; green, marbled with white and reddish-brown, interior pearly; operculum testaceous, thick.

Shell attains to a length of 180 mm. both in height and diametre.

Occurs in warmer parts of Japan, as Ryukyu and Formosa.

Turbo petholatus *Linné*

"Ryûten"

Pl. LXVIII, fig. 11.　×1

Shell ovate, imperforated, smooth, polished, whorls rather depressed round the upper part; reddish-fawn colour, clouded with brown red and spirally painted with green and yellow bands, blotched with black or dark brown, columella yellow, interior silvered; operculum testaceous, thick.

Shell attains to a length of 70 mm. both in height and diametre; inhabits warmer parts of Japan.

Turbo cornutus *Solander*

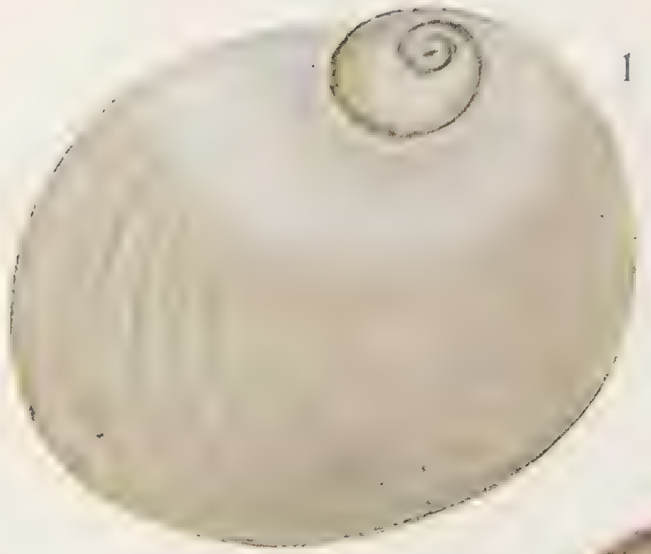
"Sazae"

Pl. LXVIII, fig. 12.　×1

Shell ovate imperforated, rather thin, whorls spirally ribbed, intermediate grooves obliquely very finely laminated, last whorl armed with two rows of large erect tubular scales; rufous olive, interior pearly silver.

Abundantly occurs in all Japan, its flesh commonly used as food.

Inhabits shallow rocky sargassum sea.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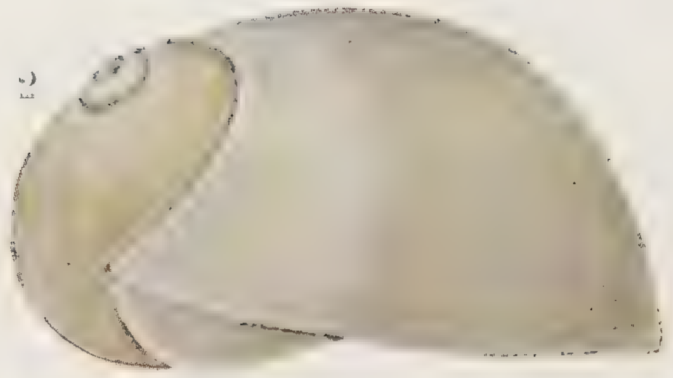
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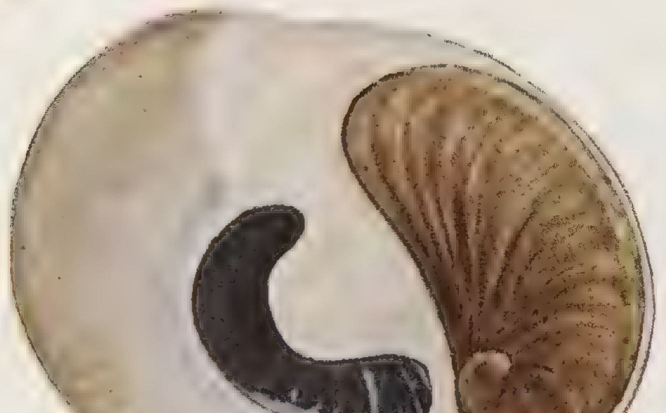
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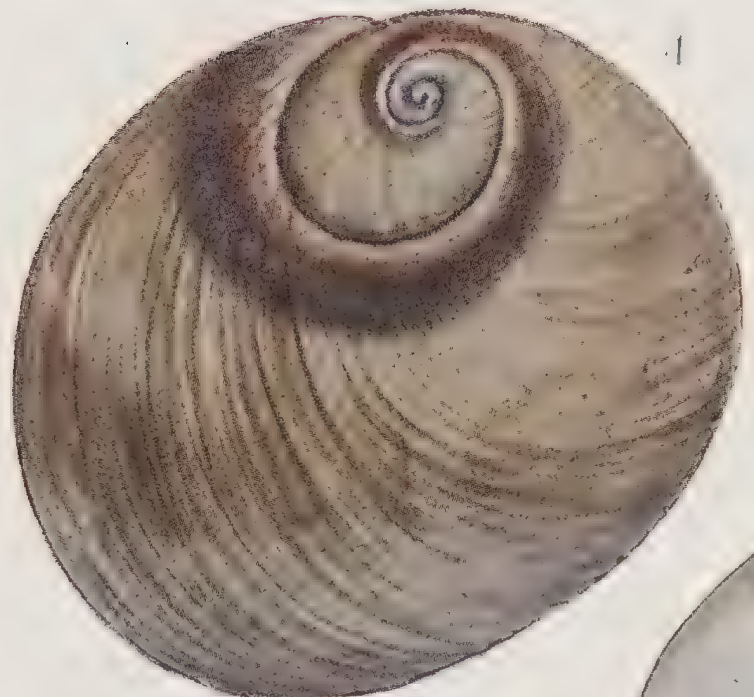
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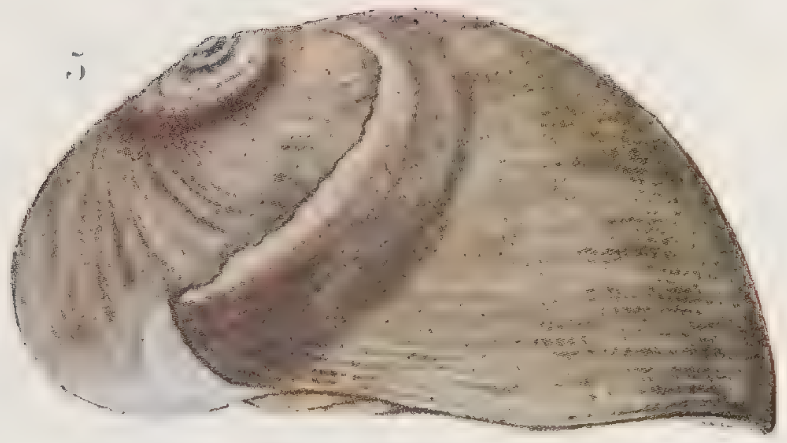
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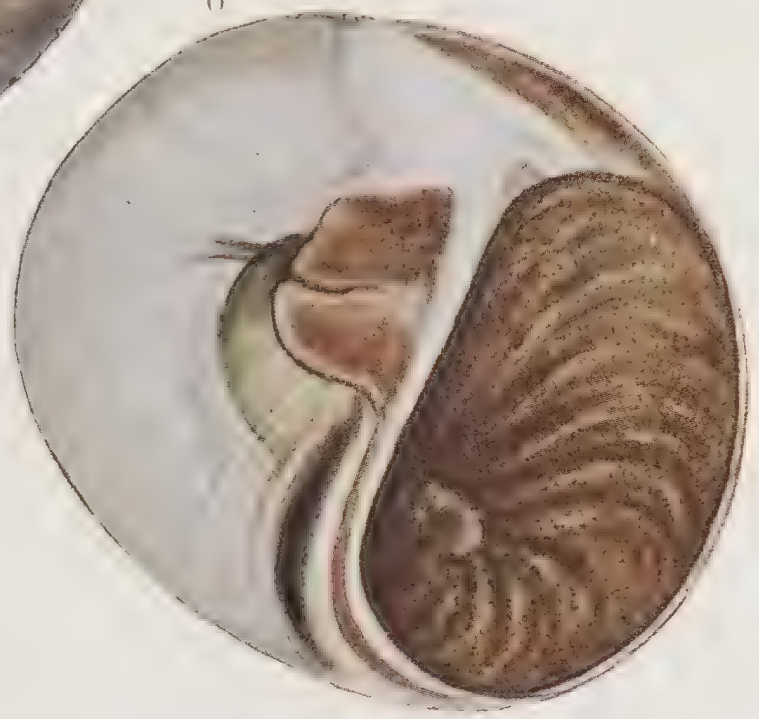
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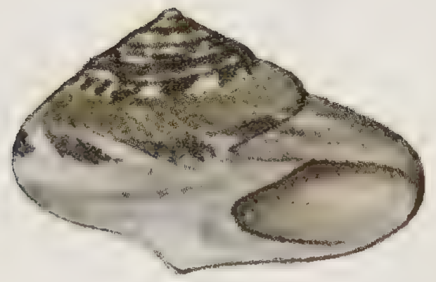
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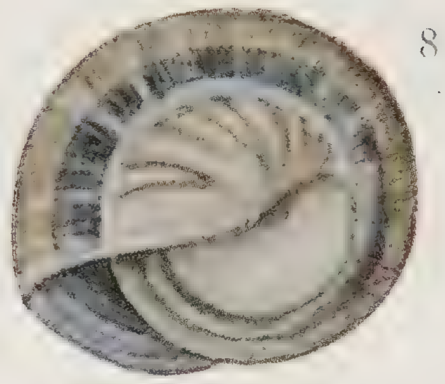
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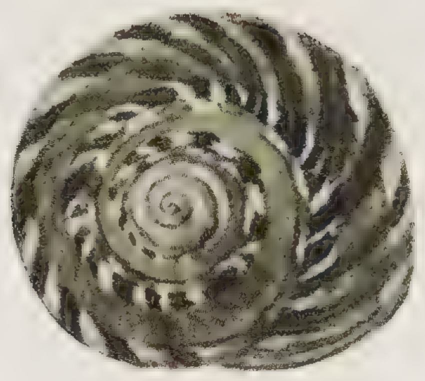
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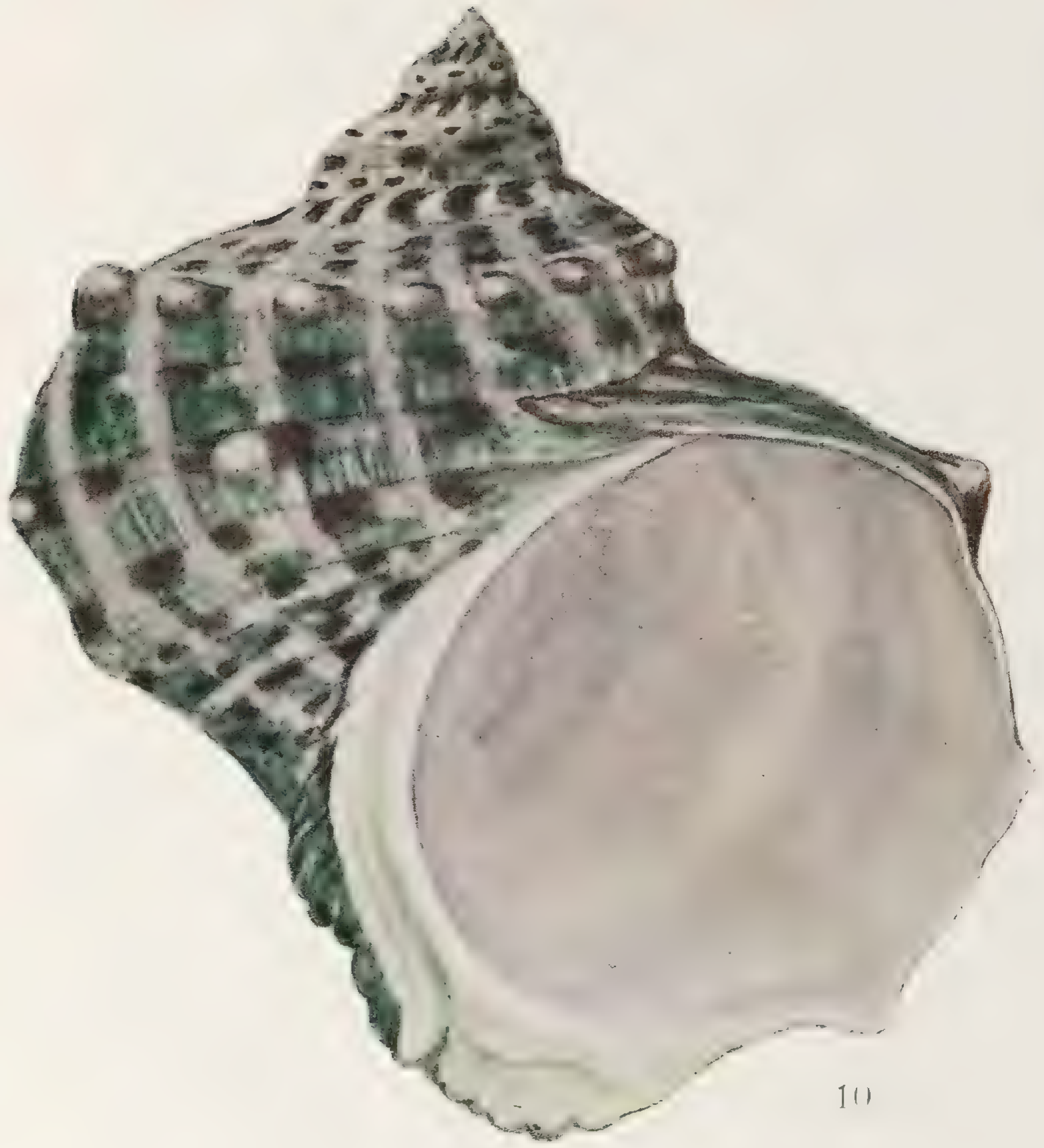
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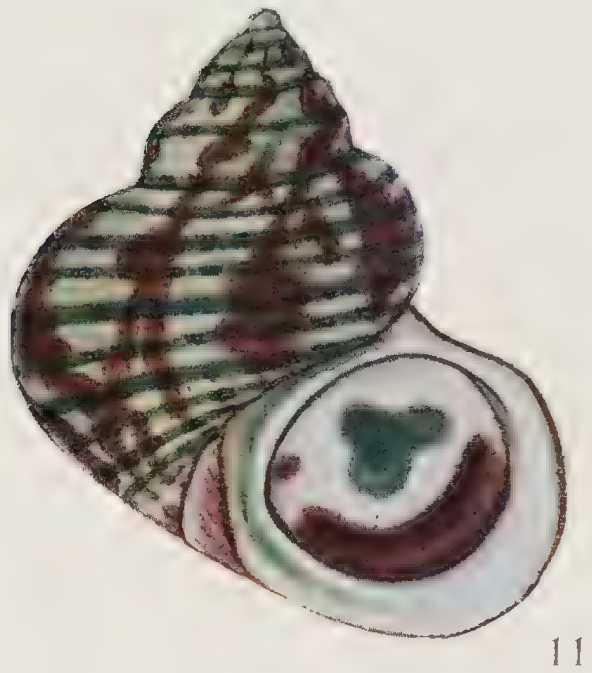
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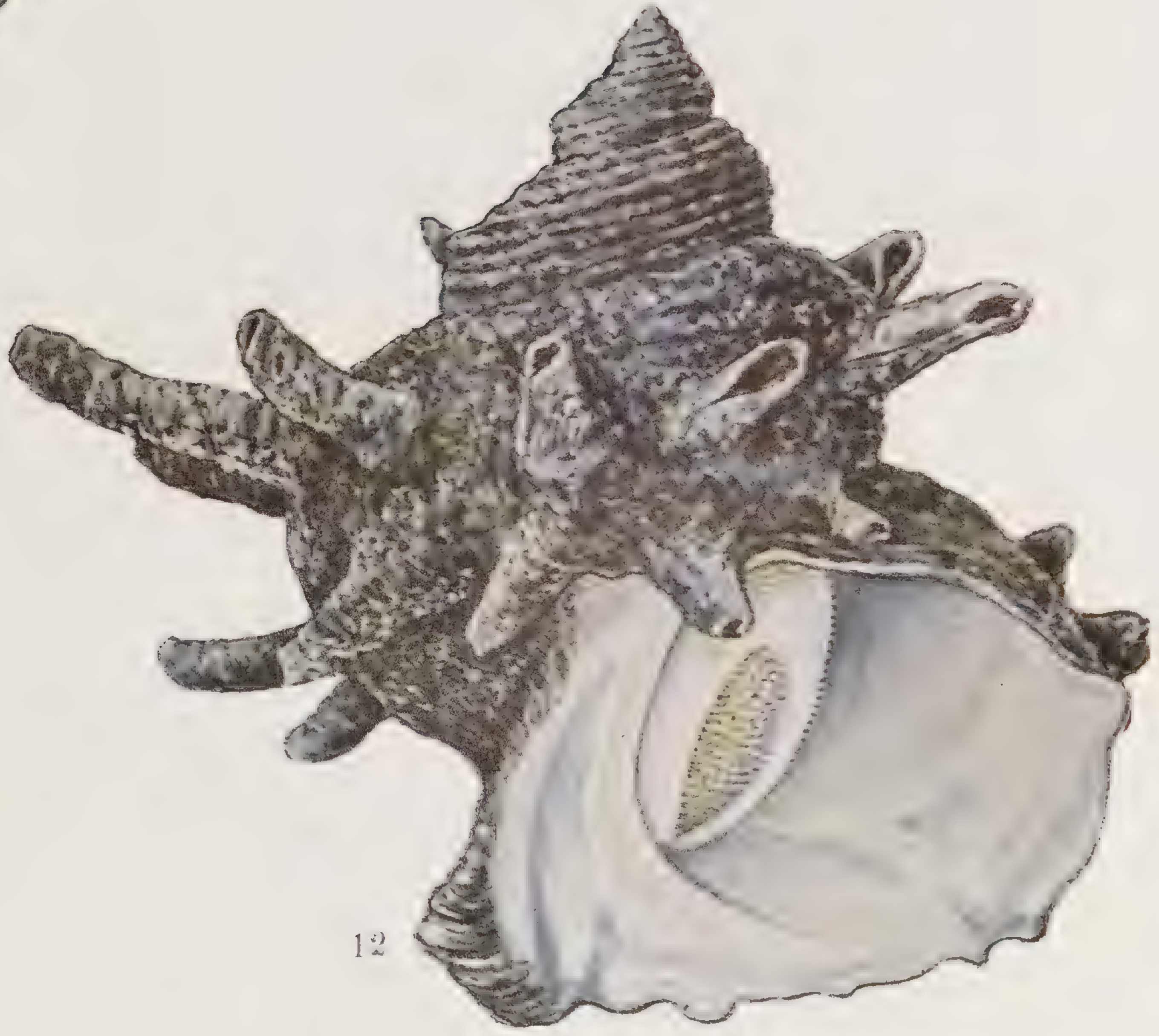
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マルタニシ

Viviparus malleatus (*Reeve*)

（第六十九圖版　第一圖）　×1

圓錐形の卷貝にして,丸味を帶びたる右卷貝殼を有し,螺層は約 6 を數へ,各螺層は圓く脹る. 螺塔は簡單なる圓錐形にして,殼頂は往々蝕壞せらる. 殼表は帶綠灰色を呈し,往々不規則なる暗色の縱線を有す. 殼質薄脆,殼口は略橢圓形をなし,內面は帶菫白色なり. 蓋は角質斧形にして中央部卵形に窪み褐色にして多くの輪を有す.

直徑 30 粍位. 胎生にして六月下旬より七月下旬まで幼貝を產む. 全國的に分布し,池沼に多く,肉は食用となる.

ナガタニシ

Viviparus longispira (*Smith*)

（第六十九圖版　第二圖）　×1

貝殼狹長のタニシにして,螺層は約 7 階を數へ,螺塔は高く一種の獨樂形をなす. 螺層中殼頂に近き 2–3 層は蝕壞さるゝを常とす. 體層は特に大ならず. 殼底に移行する所に於て著しき角をなす. 殼色は帶綠灰色にして黑き縱の火焰狀斑を有す. 殼口は比較的小さく,亞卵形を呈す.

直徑 27 粍, 高 50 粍位, 本種は琵琶湖の特產種なり.

キヌガサガヒ

Xenophora exuta (*Reeve*)

第六十九圖版　第三,四,五圖　×1

貝殼は笠形にして薄く,螺塔は壓せられたる圓錐形を呈し,螺層は 7–8 階を數へ,胎殼は小なり. 各螺層は漸次擴張す. 殼表は黃褐色を呈し,粘土細工を指頭にて斜に壓し之に渦紋を印したるが如き美麗なる彫刻を有す. 臍孔大にして深し. 蓋は稍長方形を呈し角質にして側核を有す.

直徑 80 粍位. 本邦中部に產す.

クマサカガヒ

Xenophora pallidula *Reeve*

（第六十九圖版　第六,七,八圖）　×1

笠形の貝殼を有し,貝殼の縫合及周緣部には他の貝殼片又は礫等を膠着し海底を匍匐するに際し其磨擦障碍を免れんがために輕く跳躍しつゝ進行すると云ふ. 膠着せる貝殼は多くは二枚貝にして,內面を上に向け恰も他の貝殼の死殼片附着せるが如き外觀を裝ふ. 臍孔は小さく,殼底には多くの細き螺脈を有す. 蓋は卵形茶褐色にして側核を有す.

直徑 50 粍位. 本邦中部,南部の暖海に產す.

シドロ

Strombus japonicus (*Reeve*)

（第六十九圖版　第九,十圖）　×1

貝殼は紡錘形をなし,袖は後突起を缺き,內面に齒狀の隆起條を有し,滑層は擴張せず. 螺塔高く,淡褐色を帶とし,體層は暗褐色にして數條の白帶を繞らし螺脈著しく,他の諸螺層にありては縱肋顯著なり. 後溝深くして長く,前溝は少しく反曲し,殼口內は白色なり.

長 60 粍位. 中部日本に產す.

マガキガヒ

Strombus luhuanus *Linné*

（第六十九圖版　第十一,十二圖）　×1

貝の形態は芋貝形にして,螺塔は高からず. 螺層は約 7 階を有するも,體層は特に大にして長く他層頗る小なり. 表面は白地に褐色の籠樣紋を有し,又若干の黃色帶を有するを普通とす. 殼口は狹長にして其內面は赤く,內唇には黑く太き縱線あり. 外唇の前部に可なり顯著なる凹所あるを以て芋貝と區別することを得べし. 芋貝類には敵に嚙付き有毒なるもの多く,本種は之が擬態なりと考へらる.

長 60 粍位. 中部及南部日本に產す.

ベニソデ

Strombus aurisdianæ guttatus *Kiener*

（第六十九圖版　第十三,十四,十五圖）　×1

長凡 90 粍位の貝殼を有す. 螺塔高く圓錐形をなし螺層は約 8 階を數へ其周緣に 1 列の小結節を有す. 體層は頗る大きく上部周緣には 1 列の大なる結節を有す. 殼口は狹長にして鮮紅色を呈し,外唇は肥厚し袖狀をなし其後角は尖る. 前溝は太く,反曲延長して嘴をなす. 殼色は背面は淡褐色に白點を雜へ,全腹面は白色の滑層を被り光澤强し.

本邦南部暖海に產す.

カハニナ

Semisulcospira libertina *Gould*

（第六十九圖版　第十六圖）　×1

最も普通なる淡水產卷貝の一にして,殼は暗色の殼皮を被り,概して螺塔高く,頂部の 1 階又は 1 階半は侵蝕せられおるを常とす. 各螺層は稍脹れ,螺脈と縱肋よりなる細き格子狀彫刻を有す. 殼口は長卵形にして內面は空色を呈す. 臍孔を有せず. 蓋は角質にして亞螺狀を呈す.

直徑 10 粍, 高 20 粍位. 全國到る所の河湖に產し,肺臟ヂストマの中間宿主として有名なり. 肉は往々食用に供せらる.

Viviparus malleatus (*Reeve*)

"Marutanisi."

Pl. LXIX, fig. 1.　×1

Shell globosely conical, rather inflated, bright olive, whorls rounded, longitudinal copiously plicately striated, spirally obscurely linearly punctured, everywhere malleated; aperture pyriformly ovate, lip blackedged. Widely distributed in Japan, from the extreme north of the Main Island to the Ryu-kyu Islands and Formosa.

Viviparus longispira (*Smith*)

"Nagatanisi."

Pl. LXIX, fig. 2.　×1

Shell globosely conical, somewhat elongated; apex rather high, suture line deeply grooved. Outer colour is greenish gray with longitudinal flame-like black patches. Aperture is comparatively small and suboval-like. It attains 30 mm. in diameter and 55 mm. in height. The species is only known at Lake Biwa.

Xenophora exuta (*Reeve*)

"Kinukasa-gai"

Pl. LXIX, figs. 3, 4, 5.　×1

Suture and periphery undulated, upper surface occasionally agglutinating at the suture near the apex, but usually free from foreign bodies, obliquely striated in undulate manner and grooved; under surface shining, smooth, surrounded by a border of several close, rugose revolving striae, umbilical funnel closely striated; yellowish or orange-brown, lighter coloured beneath.

Xenophora pallidula *Reeve*

"Kumasaka-gai"

Pl. LXIX, figs. 6, 7, 8.　×1

Shell conical, tochiform, imperforate, obliquely striate, profusely agglutinating; base subplane, thinly arcuately radiately striate, very minutely crispate.

The peculiarity of this species is the habit of agglutinating foreign bodies to the upper surface of the shell, which is carried to such an extent in some instances as to conceal the volutions and give the structure the appearance of a small pile of fragments of stones and shells. This is imitation of its surroundings and is protective in its nature. Inhabits muddy bottoms about 50–100 metres depth; distributed throughout outer coasts of Main Island.

Storombus japonicus *Reeve*

"Sidoro."

Pl. LXIX, figs 9, 10.　×1

Longitudinally finely ribbed towards the apex, everywhere closely regularly spirally grooved, upper part of whorls slantingly concave with the angle obscurely nodose; whitish stained and variegated with chestnut, encircled with narrow white zones sagittately marked with chestnut; interior white, lip radiately ridged. Length about 70 mm. Commonly occurs in sandy bottoms in central and southern Japan.

Storombus luhuanus *Linné*

"Magaki-gai."

Pl. LXIX, figs. 11, 12.　×1

Shell covered with a dark epidermis, under which the markings are chocolate longitudinal intercupted zigzag lines, the columella very dark or nearly black. Aperture ridged within, carnelian or rose-red.

Commonly occurs in shallow waters in Japan. Length about 60 mm.

Strombus aurisdianae guttatus *Kiener*

"Benisode."

Pl. LXIX, figs. 3, 14, 15.　×1

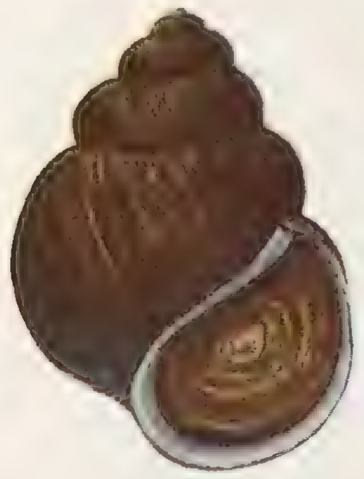
Shell varying from nearly smooth to roughly nodulous, the nodules developed here and there upon revolving rounded ribs spire-whorls and upper part of body-whorl angulated and nodose on the angle, callus of the inner lip far-spreading, sometimes mounting the spire to near its apex, interior of outer lip with posterior radiating ridges; orange brown or light chestnut, speckled and marbled with white, polished; lip and columella callus whitish, more or less tinged and deepening within the aperture to bright carnelian.

Semisulcospira libertina *Gould*

"Kawanina"

Pl. LXIX, fig. 16.　×1

Shell elongately spiral, whorls inflated; longitudinal ribs and spirally striae crossed on the whorls. Surface of shell is covered with epidermis of blackish brown colour. Suture line is distinct. Aperture elongately oval; outer lip thin and white. The species appears to be distributed throughout Japan, from Hokkaido to Formosa.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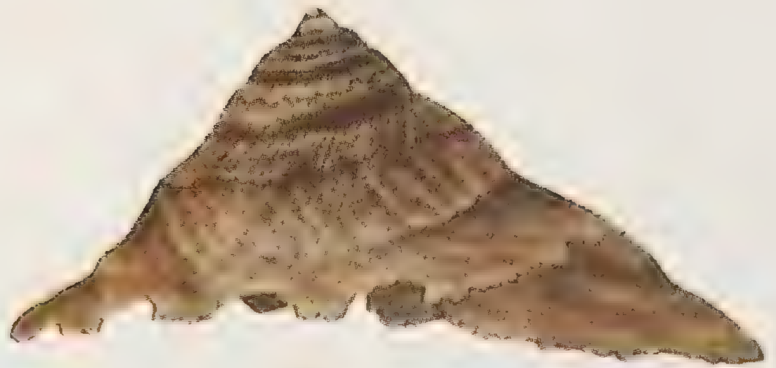
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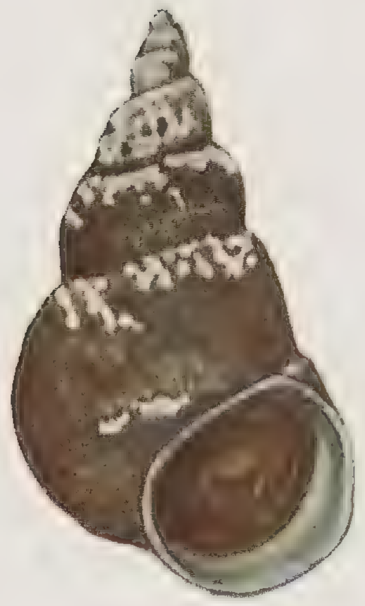
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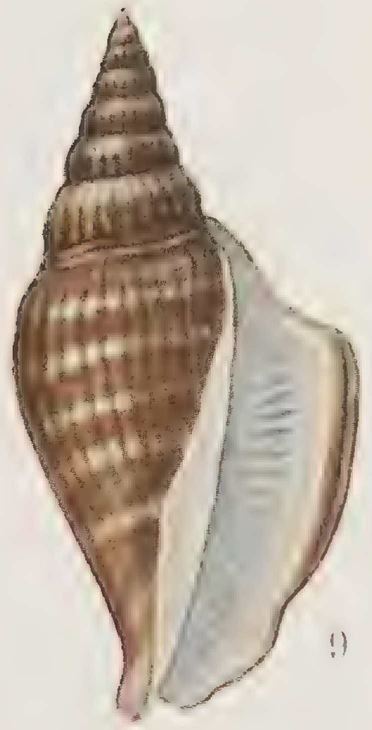
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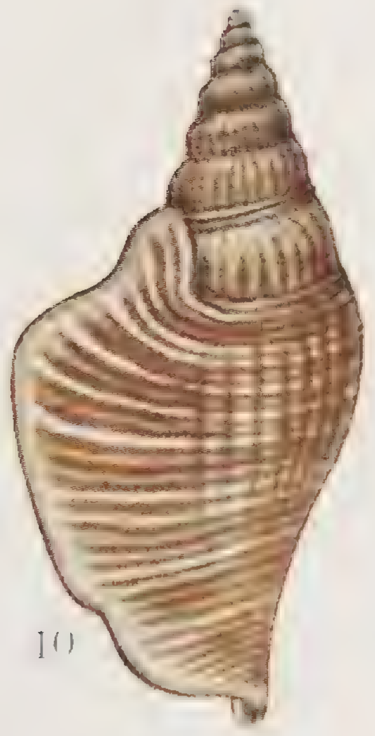
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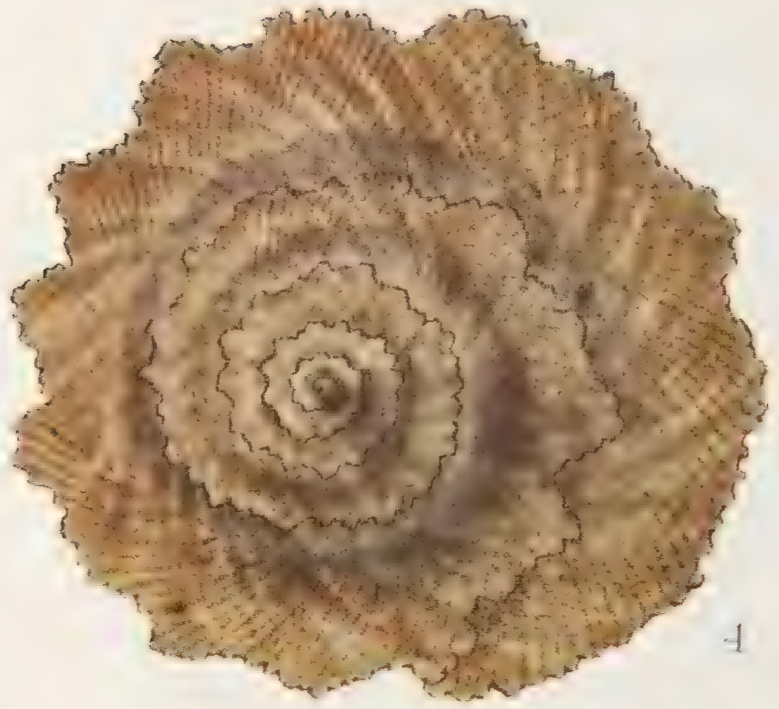
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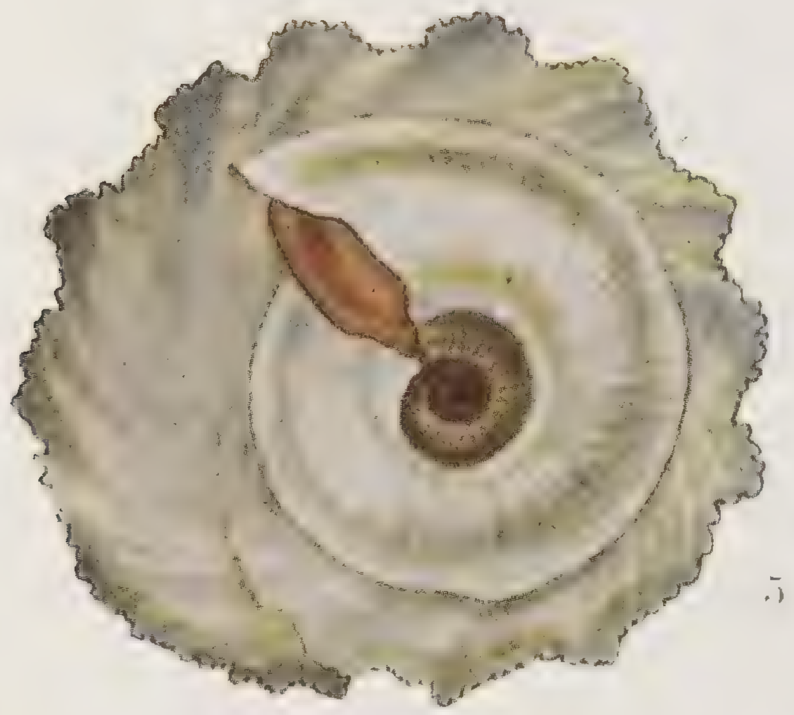
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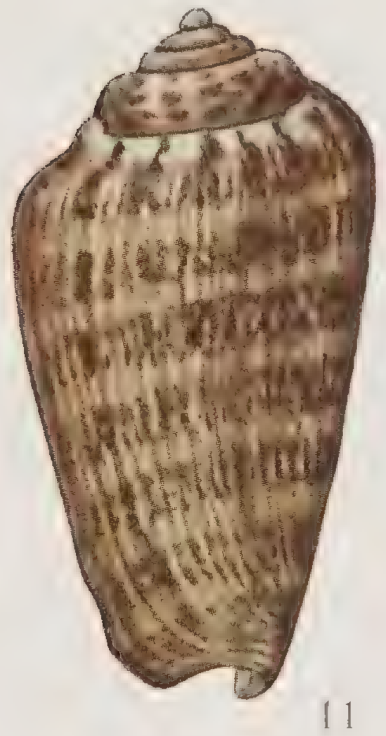
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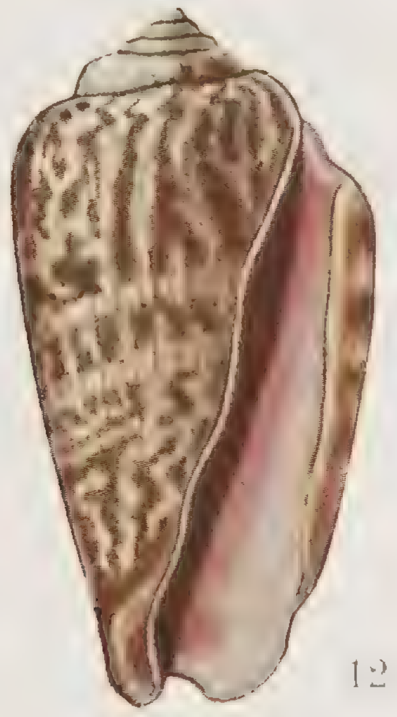
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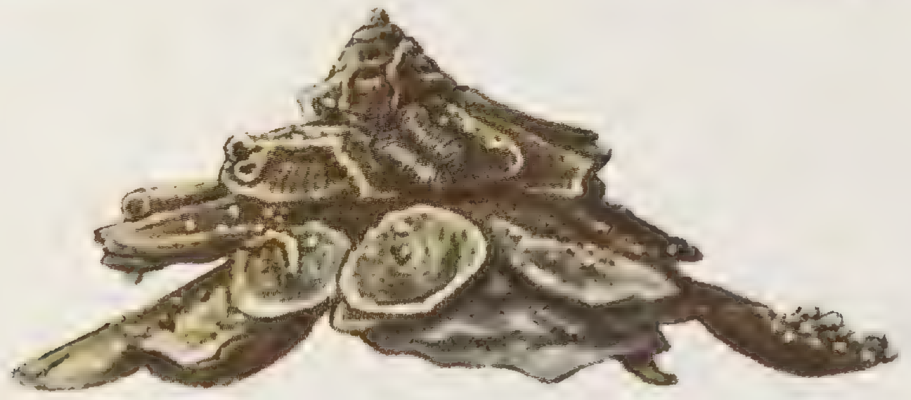
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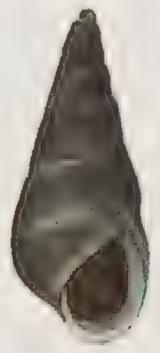
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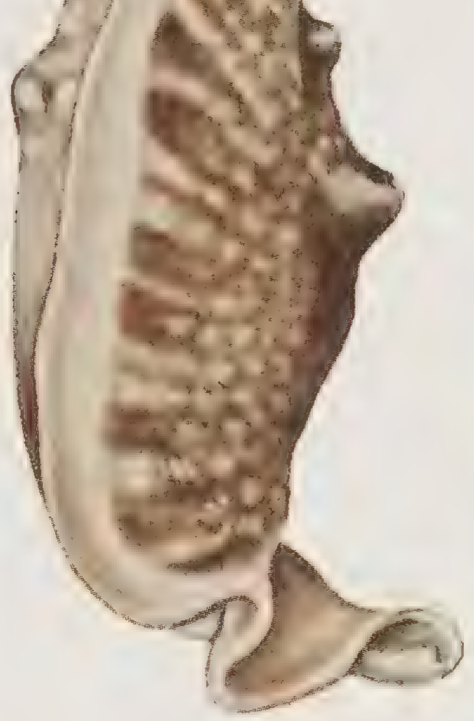
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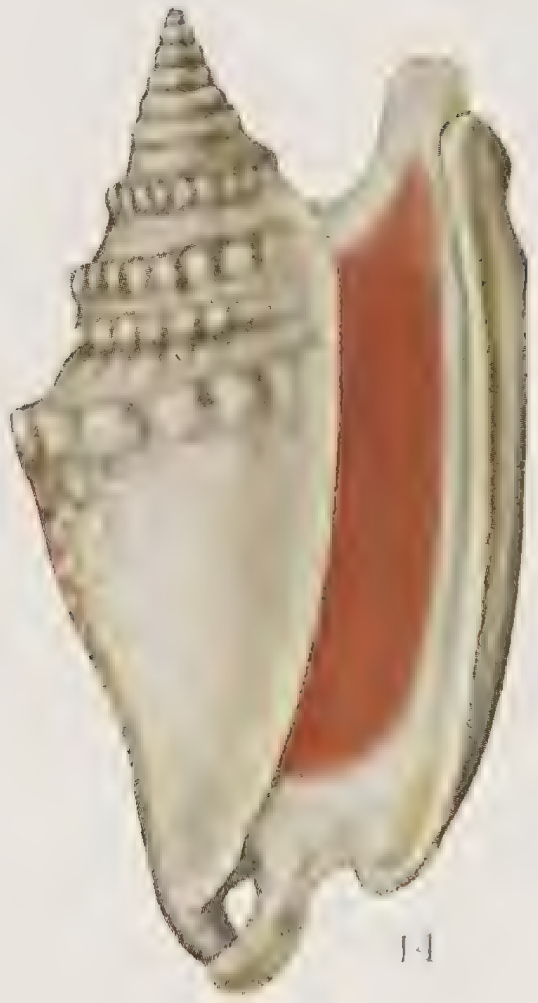
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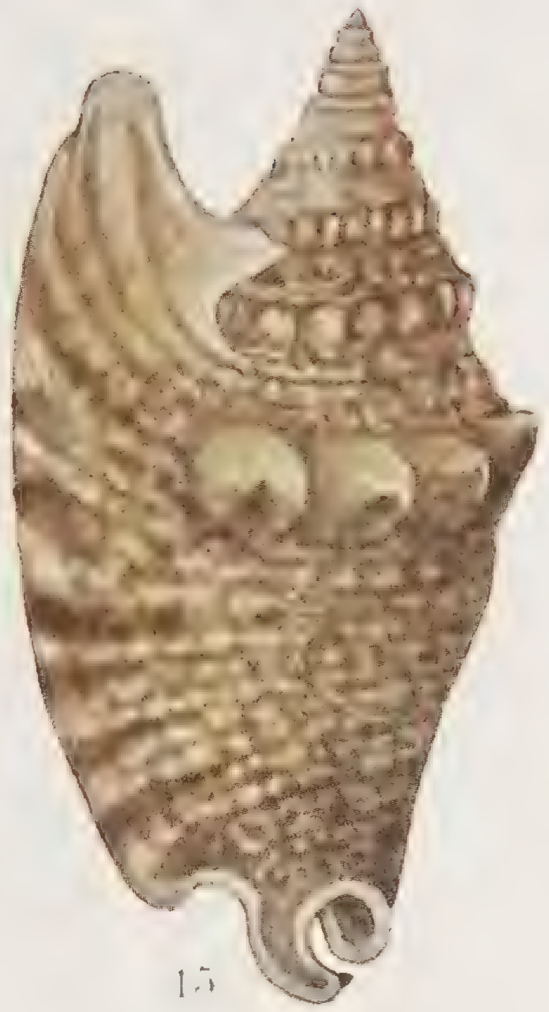
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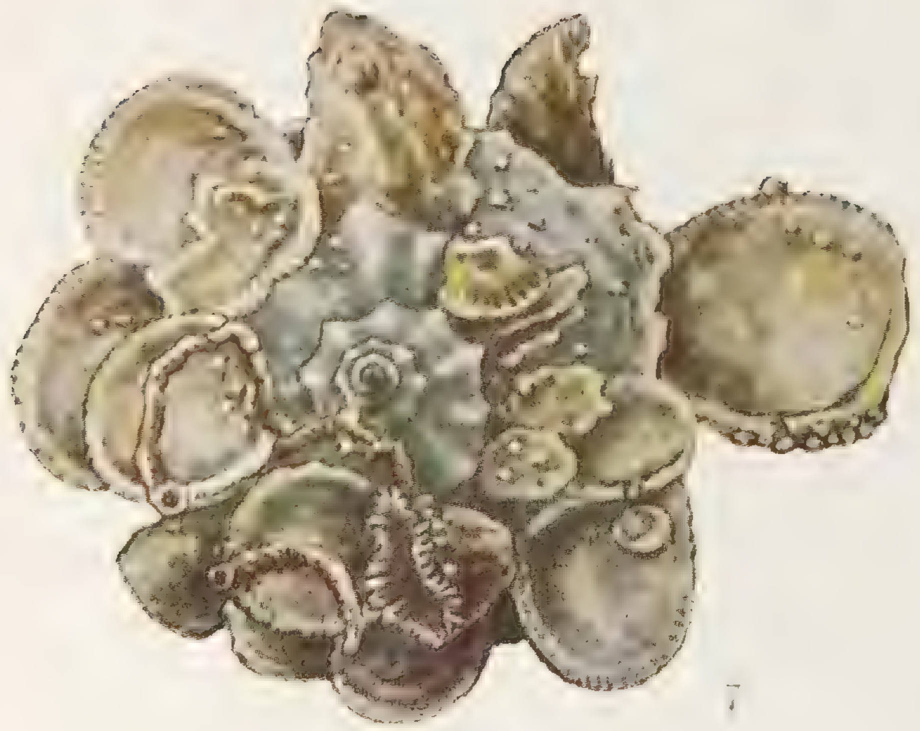
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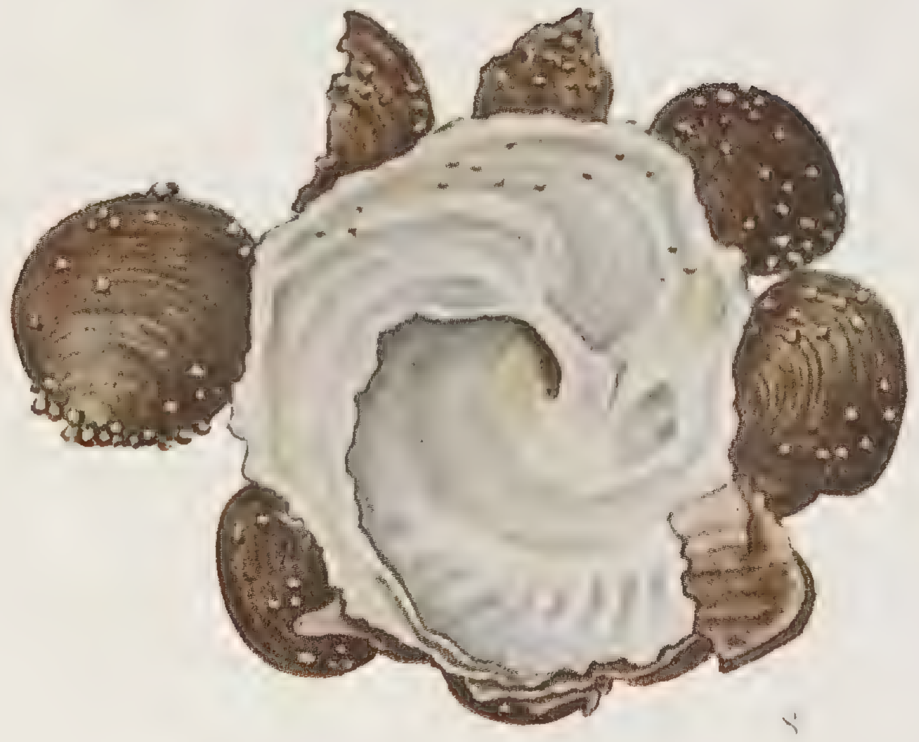
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ヤマドリガヒ

Tonna perdix (*Linné*)
（第七十圖版　第一圖）　×⅔

殼質は薄くして體層丸く脹れ，螺肋は低く約 20 を數ふ．其螺肋に更に交叉せる淺溝あり．黃褐色或は薄紅色の地に白色の新月狀又は班紋を散布し恰も鶉紋樣の外觀を呈す．殼長 200 粍に達す．

我國中部並に西部地方に分布し，肉は食用に供す．

タウカムリ

Cassis cornuta (*Linné*)
（第七十圖版　第二，三圖）　×½

殼質重厚にして倒圓錐形を呈す．螺塔小く扁平に近し肩角に大なる突起を具へ其下に 2 列の小突起を繞らす．殼の表面は灰白色にして細き布目狀の彫刻あり．

外唇厚く反轉し淡肉色にして口內及齒間は黃褐色を呈す．殼高 300 粍位．

マンバウガヒ

Cypraecassis rufa (*Linné*)
（第七十圖版　第四，五圖）　×½

前種「タウカムリ」に似て稍小形なり．殼質重厚にして兩唇は少しく反曲し，肉紅色を呈す．表面に結節多く葡萄色の地に黃紅色又はチョコレート色の班紋あり．殼長 150 乃至 200 粍に達し，南日本に產す．

スイジガヒ

Lambis chiragra (*Linné*)
（第七十圖版　第六，七圖）　×⅔

殼質强厚にして大なる紡錘形をなし外殼擴張す．管狀突起は 6 個ありて四方に射出し恰も水字形をなす．卽ち殼口上面に 2 個，外唇に 3 個，及び內唇前端に 1 個あり．體層には太き若干の螺層を有し，灰白色の地に褐色班を交ふ．殼口は狹くして鮮紅色を彩る．殼高 200-300 粍に達す．我國南方の暖海に棲息す．

Tonna perdix (*Linné*)

" Yamadori-gai "
Pl. LXX, fig. 1.　×⅔

Shell thin inflated, with about twenty low ribs, and rather narrow, shallow intervening grooves; fulvous brown or light reddish bay, more or less plentifully marked with whitish lunate spots or maculations.

Shell measures about 200 mm. in length.

Distribution central and western Japan. Its meat is used as food.

Cassis cornuta (*Linné*)

" Tókamuri "
Pl. LXX, figs. 2, 3.　×½

Honeycombed between the revolving ridges, with three spiral rows of distant compressed tubercles; yellowish white, more or less tinged with yellowish brown, varices and belts sometimes brown spotted; columellar and lip expansion much produced and rounded behind, yellow cream-colour, orange brown within the aperture and between the teeth, which are whitish.

Cypraecassis rufa (*Linné*)

" Manbo-gai "
Pl. LXX, figs. 4, 5.　×½

Shell cowry-shaped, very thick, with three or four spiral rows of prominent nodules, and incised lines between them decussated by longitudinal ridges; whitish or purplish flesh-colour, stained and marbled with orange-red or chocolate, both lips very thick, yellowish or salmon-coloured, orange-red to chocolate in the interstices of the ridges.

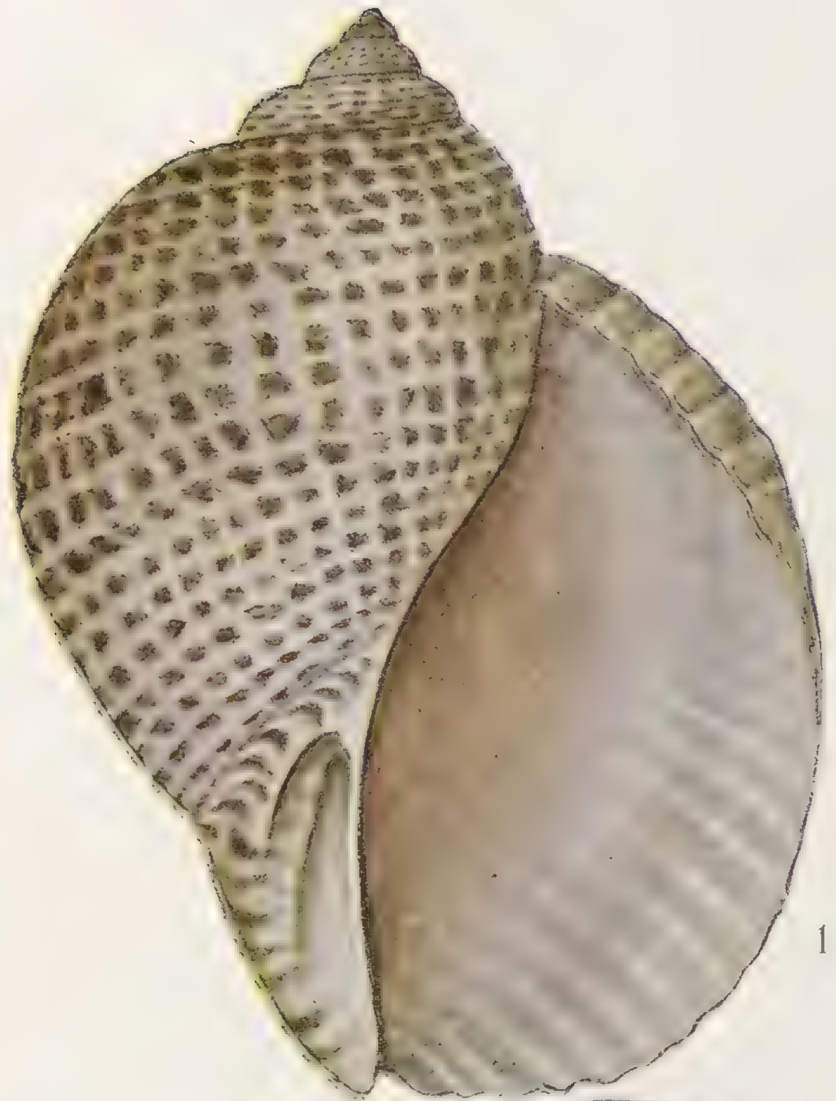
Length 150 to 200 mm. Distribution, southern Japan.

Lambis chiragra (*Linné*)

" Suizi-gai "
Pl. LXX, figs. 6, 7.　×⅔

Angular faciole or revolving rib tuberculated, the others almost unarmed, the antesinual with a compressed tubercle near the base of the digitation with a canal open at base, the outer border being bent outwards and attached above the angle of the body-whorl on which the digitation is chiefly bent and accumbent.

Distribution, southern Japan, measuring about 200 mm. to 300 mm. in length.



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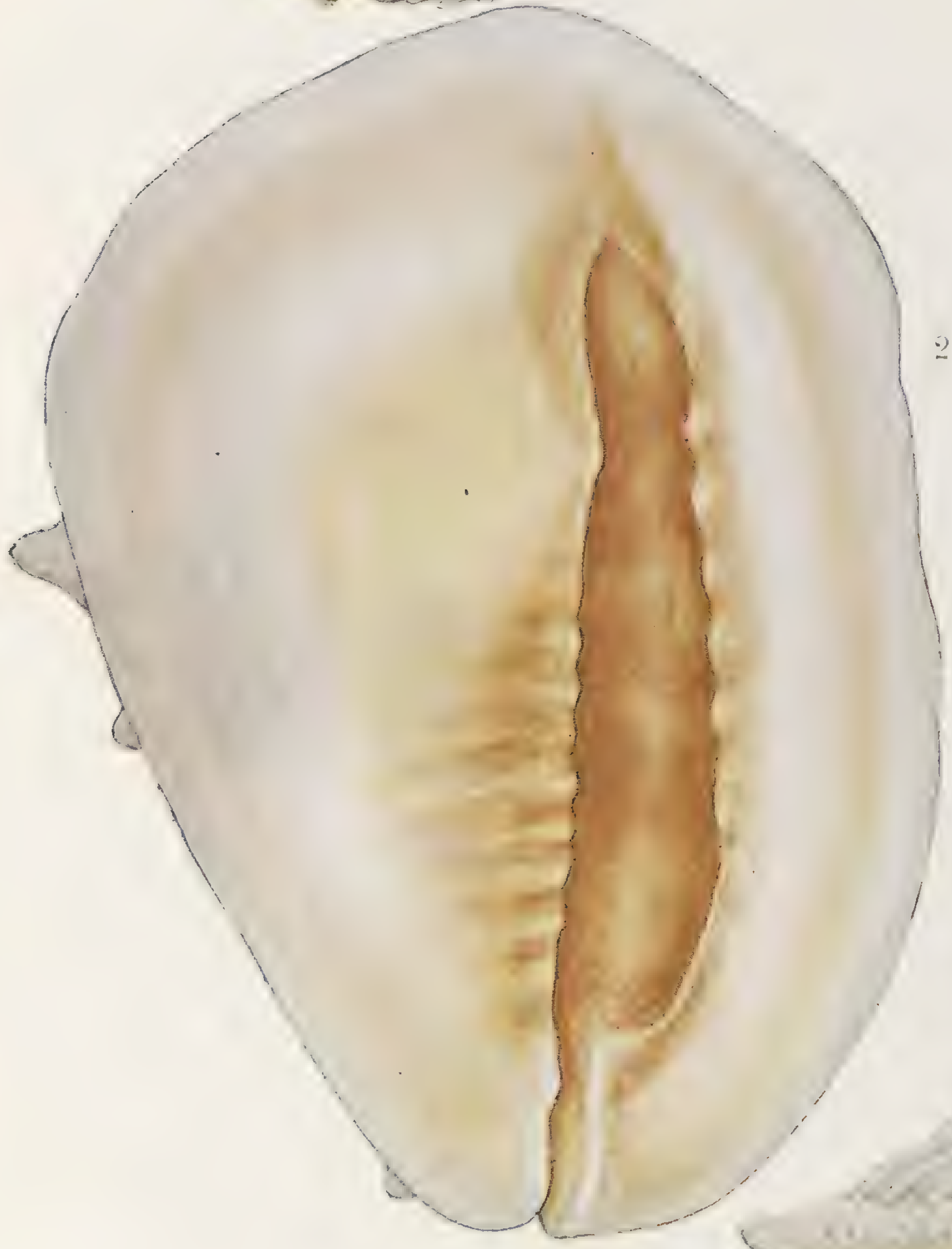

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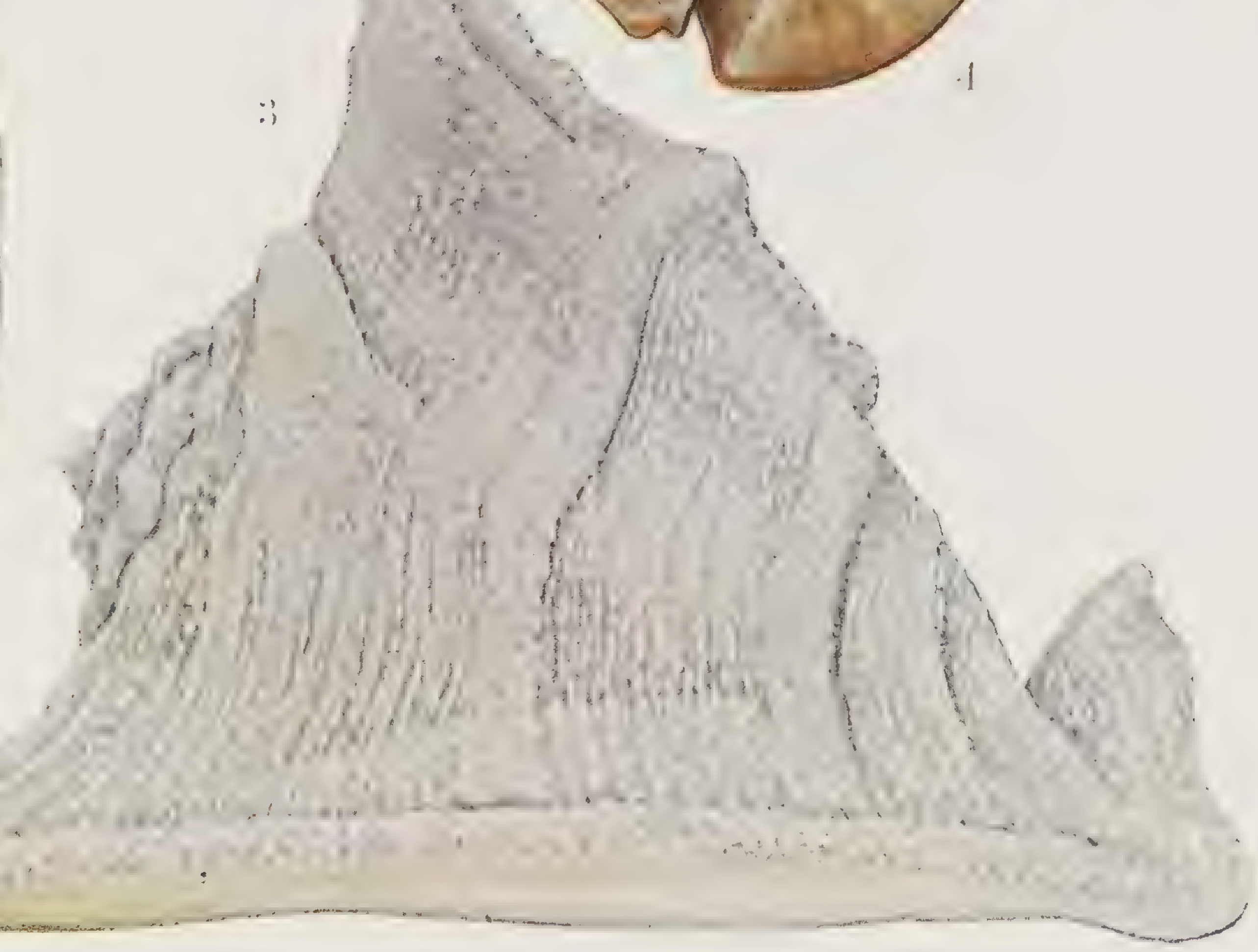

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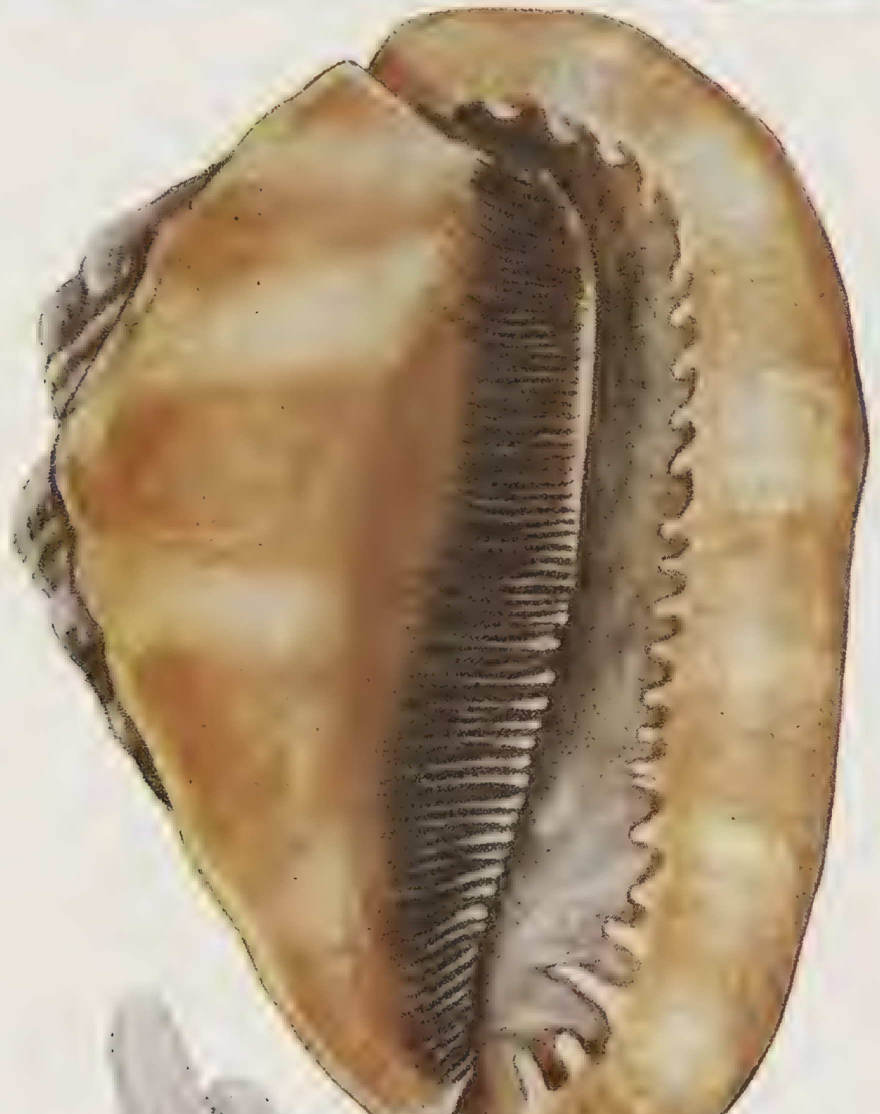

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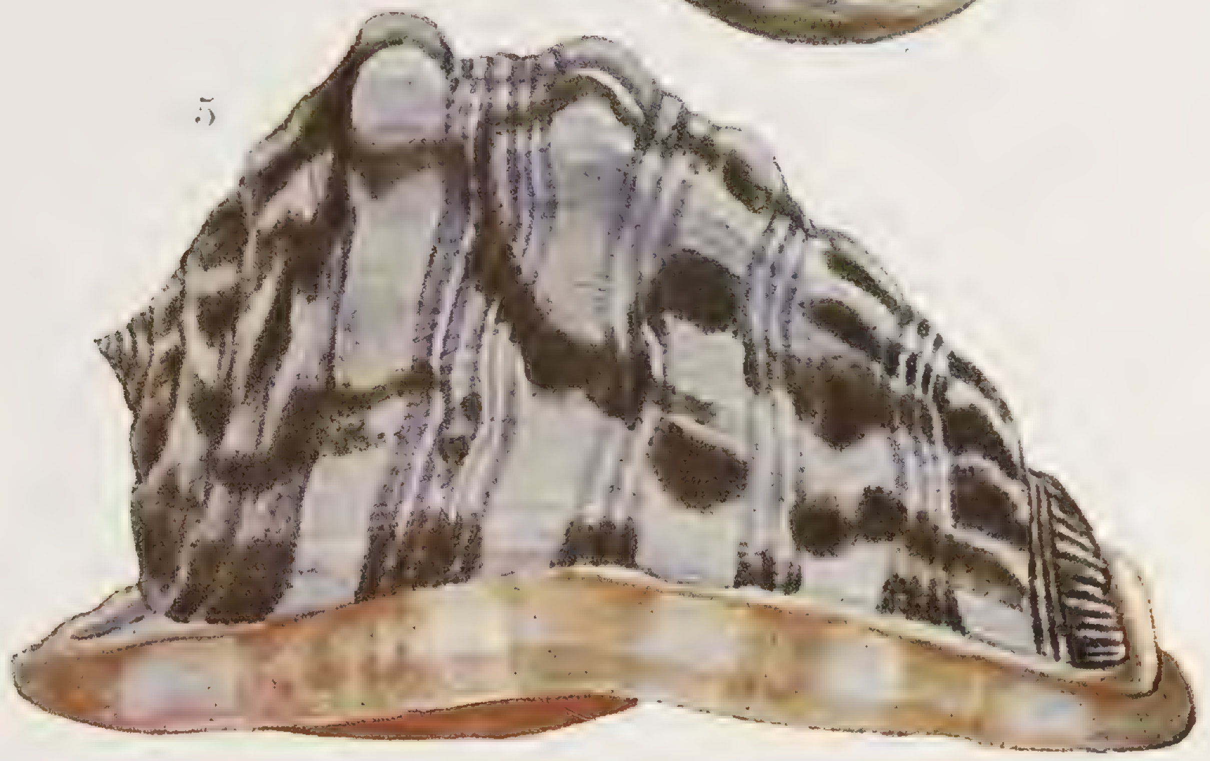

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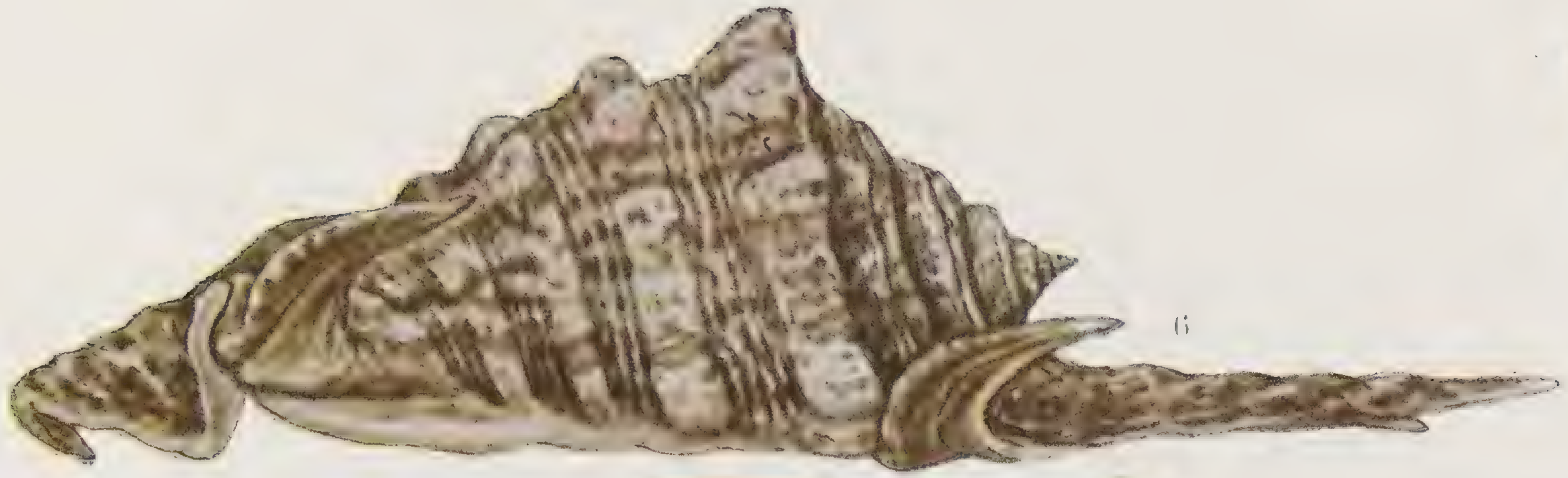

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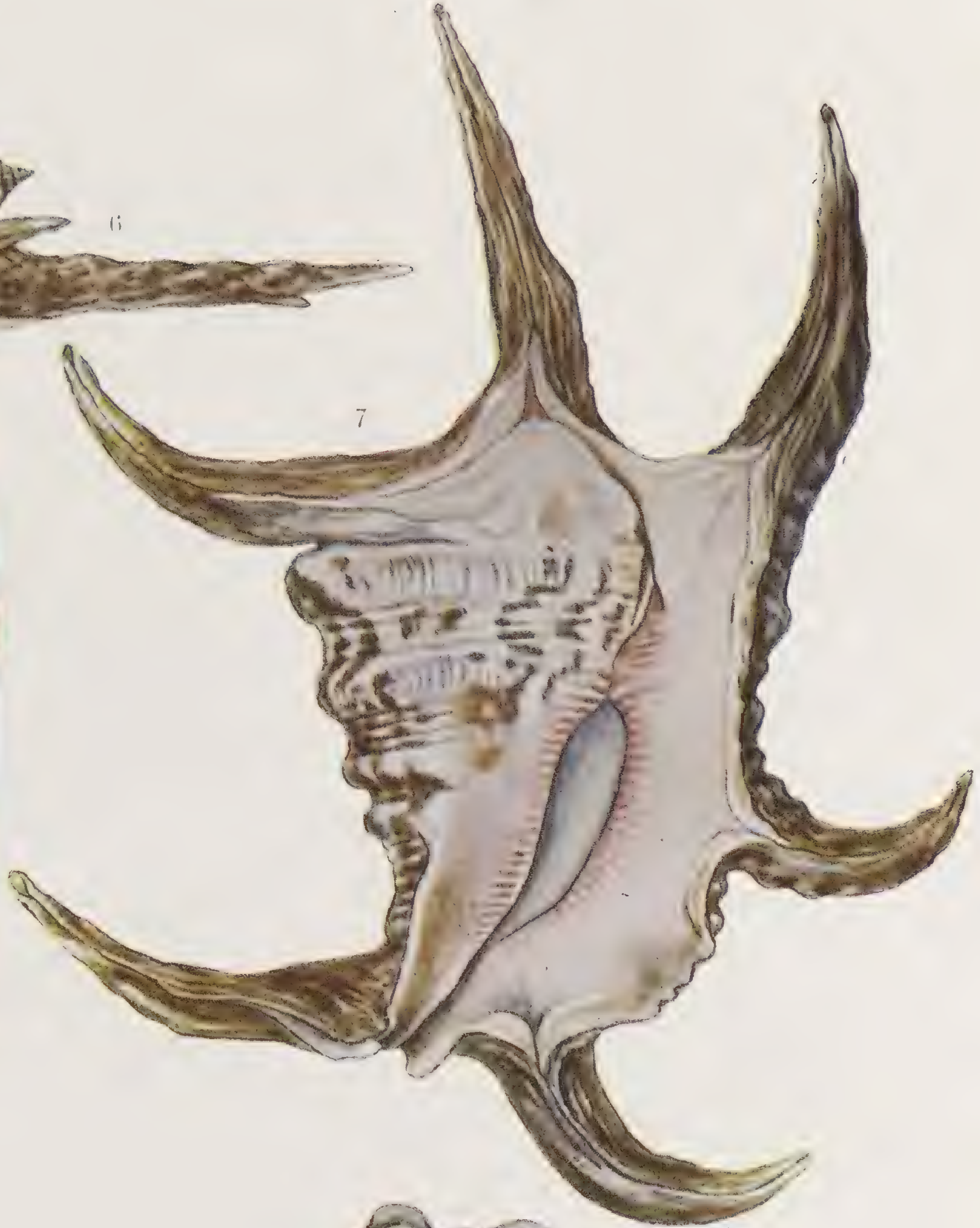

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NATIONAL MU

ハナビラダカラ

Cypraea annulus *Linné*

（第七十一圖版　第一, 二, 三圖）　×1

貝殼は稍圓く平滑なり. 淡黄色を帶ぶ. 背部には濃橙色をなせる花瓣狀環あり. 齒は大きく强く, 底面は廣く滑かなり. 南海方面の淺海, 岩礁間に棲息す.

一般に寳貝の類は幼時殼口の大なる「ナツメガヒ」の如き形にて生育し, 成熟期に達すれば殼口の外脣は次第に内方に彎曲し, 齒を生じ遂に狹き殼口となる. 外套膜は口の左右より出で背面に於て合し, 常に分泌をなす故に生時の貝殼面は甚だ美麗なり.

ハナマルユキ

Cypraea caput-serpentis *Linné*

（第七十一圖版　第四, 五, 六圖）　×1

色彩黑褐色にして, 背面に大さ不同の白色斑點あり. 兩端及齒は白色にして, 腹面は灰白色なり. 大さ長徑30粍前後にして, 本邦中部及南方地方に分布する普通の寳貝なり.

ジヤノメダカラ

Cypraea argus *Linné*

（第七十一圖版　第七, 八圖）　×1

形態稍楕圓形にして, 背面大小の環狀斑紋を有し底面には4個の褐色斑點あり. 殼長70粍餘にして南方暖海に棲息す.

ハチジヤウダカラ

Cypraea mauritiana *Linné*

（第七十一圖版　第九, 十圖）　×1

楕圓形の稍長き貝殼にして背面は, 幼時靑白の地に淡栗色の不明瞭の帶を有すれど成長するに從ひ栗色の梵字模樣を飾り, 底部の兩側には大なる黑點を散らし齒は栗色なり. 動物は黑褐色にして足部邊緣は黄色を呈す. 殼長 80粍前後にして, 南海に棲息す.

ホシダカラ

Cypraea tigris *Linné*

（第七十一圖版　第十一, 十二圖）　×1

略卵形を呈し, 體層大きく, 螺塔は埋沒し, 殼口狹長にして外脣内曲し, 内外兩脣に齒を有す. 背面は白地或は淡黄褐色の地に大なる栗黑色を散布し寳貝中美麗なるものなり. 幼貝は白色又は淡褐にして, 褐色の不規則なる帶をめぐらせり. 殼長 80–100粍, 南方暖海に棲息す. 本種の貝殼に彫刻をなして裝飾, 置物等に利用さる

ムラクモダカラ

Cypraea testudinaria *Linné*

（第七十一圖版　第十三, 十四圖）　×1

稍楕圓形の大形なる寳貝にして, 乳褐色に黑點散布せり. 殼口狹く, 齒は發達せり. 殼長 130粍餘にして南方暖海に棲息す.

ウミウサギ

Amphiperas ovum (*Linné*)

（第七十一圖版　第十五, 十六圖）　×1

形狀卵圓形にして, 光澤ある磁白色をなし, 表面は頗る平滑なり. 内脣には齒を有せず, 外脣は餘り内曲せずして齒も不明瞭なり. 口内は暗柑色を呈す. 殼長100粍に達し南方暖海に產す. 動物の足部は黑色を呈し, 外套膜は貝殼を包覆す. 一見磁器の如く, 種々に加工され, 紙鎭等に用ひらる.

Cypraea annulus *Linné*

"Hanabira-dakara"

Pl. LXXI, figs. 1, 2, 3.　× $1^{1}/_{3}$

Shell ovate, smooth, smoky white, dorsal surface ornamented with a deep orange ring, which encircles a bluish or grayish centre; teeth strong, base smooth.

The young shell of this group differs in being Bulla-shaped; columella smooth, the outer lip thin, and the colour diffuse. As the animal grows, the lip and collumella thicken, teeth begin to develop and the shell becomes more solid. The function of the mantle is to deposit the calcareous substance which forms the richly coloured enamel of the shell. They inhabit the warm seas of southern Japan in shallow rocky water.

Cypraea caput-serpentis *Linné*

"Hanamaruyuki"

Pl. LXXI figs. 4, 5, 6.　× $1^{1}/_{3}$

Colour blackish brown; the spots on the back having the appearance of snow-white specks of unequal size; extremities tipped with white; base, grayish white, teeth conspicuously white.

Length 30 mm. Distributed throughout central and southern Japan.

Cypraea argus *Linné*

"Zyanome-dakara"

Pl. LXXI, figs. 7, 8.　×1

Shell cylindrical in form, colour pale brown, base ornamented with four large dark chestnut spots, two on each side of the aperture. Length about 70 mm.

Distributed throughout southern Japan.

Cypraea mauritiana *Linné*

"Hatizyo-dakara"

Pl. LXXI, figs. 9, 10.　×1

Back, liver brown, arranged in longitudinal lines of hieroglyphic character, the dorsal line is straight and the spots numerous, those on the sides being dark brown, base tinged brownish; teeth reddish brown; extremities blackish. Young shell bluish, banded with brown waves. Animal black brown, with a yellow edge to the foot. Length about 80 mm.

Distributed western and southern Japan.

Cypraea tigris *Linné*

"Hosi-dakara"

Pl. LXXI, figs. 11, 12.　×1

Whitish or yellowish, sometimes coloured with chestnut brown, promiscuously painted with large blackish blue coloured spots; base white; teeth large, sometimes bifurcate. Young shell chestnut to whitish, ornamented with interrupted bands or zigzag rusty brown flashes. Length about 80-100 mm. Distributed throughout southern Japan.

Cypraea testudinaria *Linné*

"Murakumo-dakara"

Pl. LXXI, figs. 13, 14.　×1

Milky brown, back coloured and spotted with smoky black spots; teeth fine, aperture narrow. Length about 130 mm. Distributed throughout southern Japan.

Amphiperas ovum (*Linné*)

"Umiusagi"

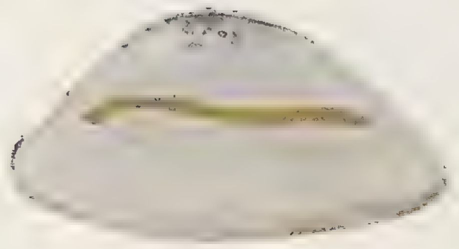
Pl. LXXI, figs. 15, 16.　×1

Shell cypriform, ovoid, ventricose, with but slightly rostrated extremities. The animal has a large blackish foot and the mantle margin is simple. Back white in colour, brownish red within the aperture.

Length 100 mm. Distributed throughout southern Japan.

第七十一圖版

PL. LXXI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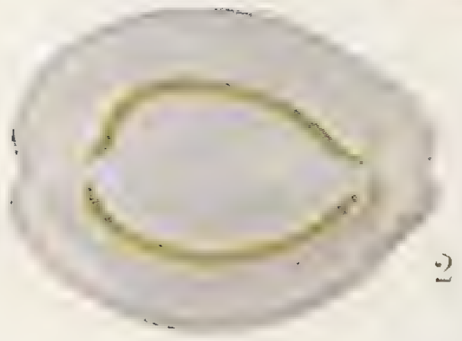
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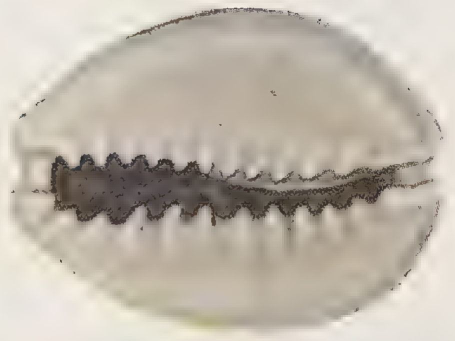
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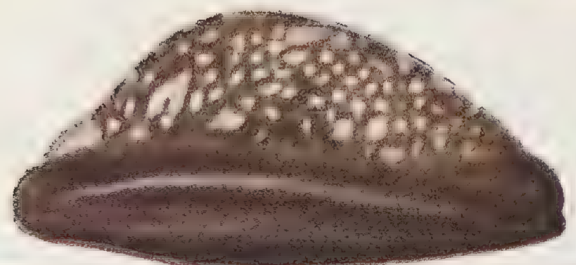
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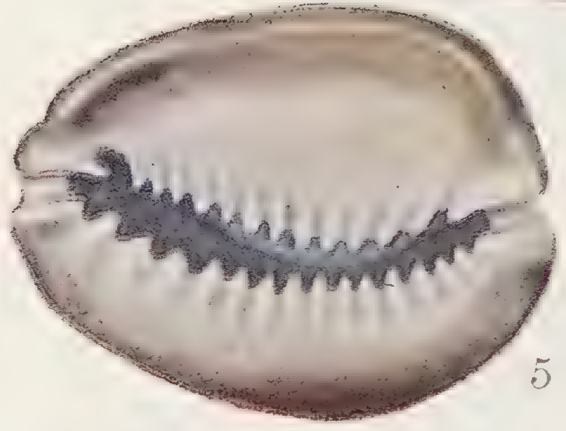
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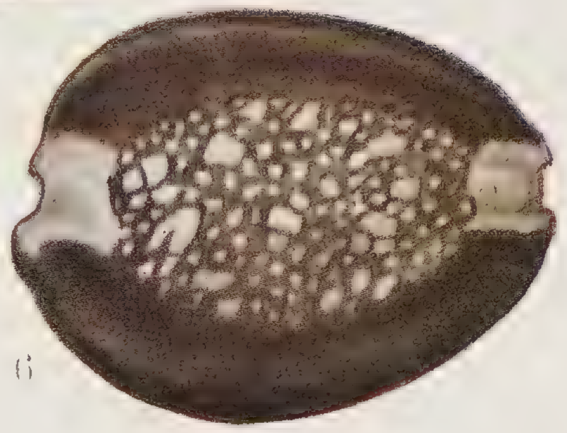
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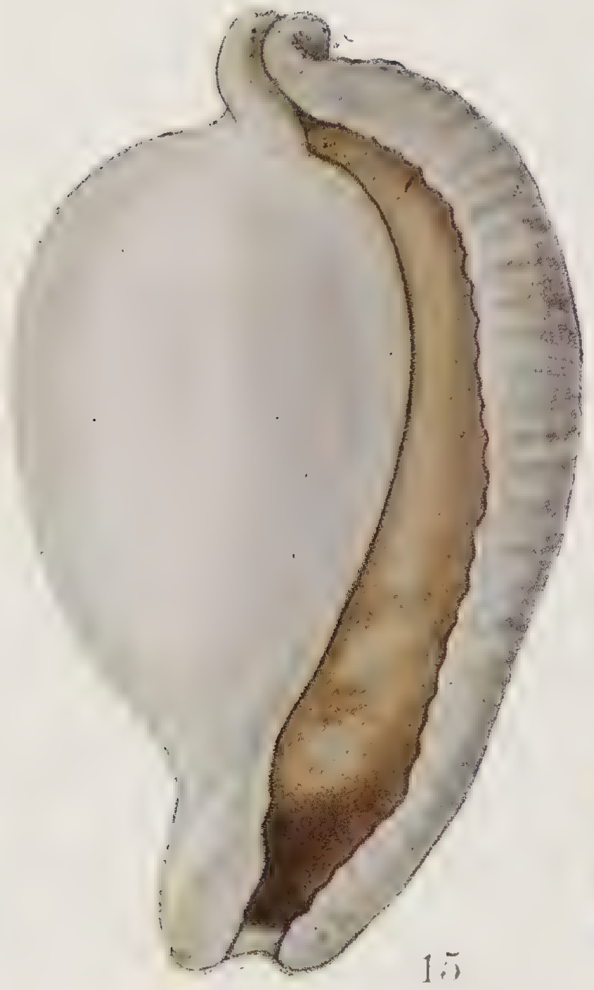
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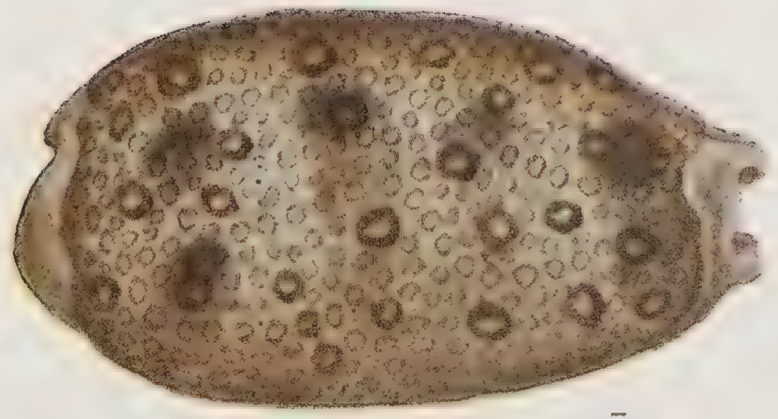
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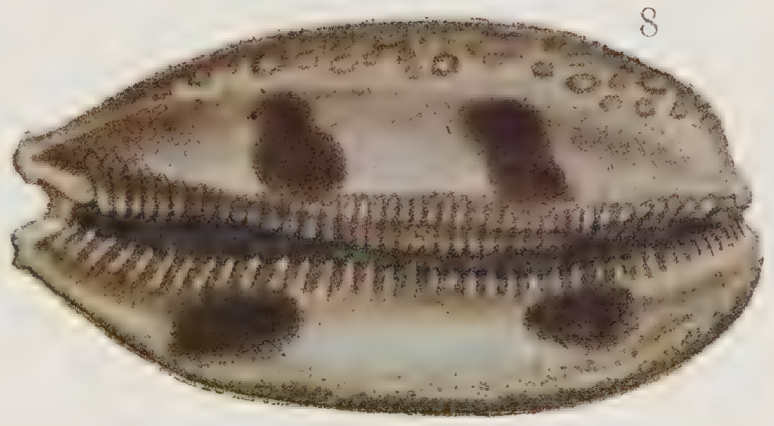
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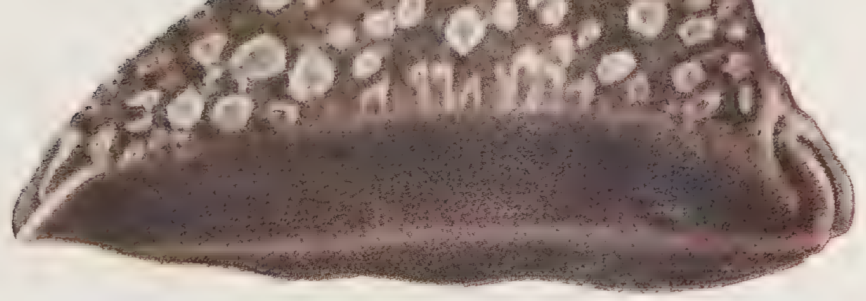
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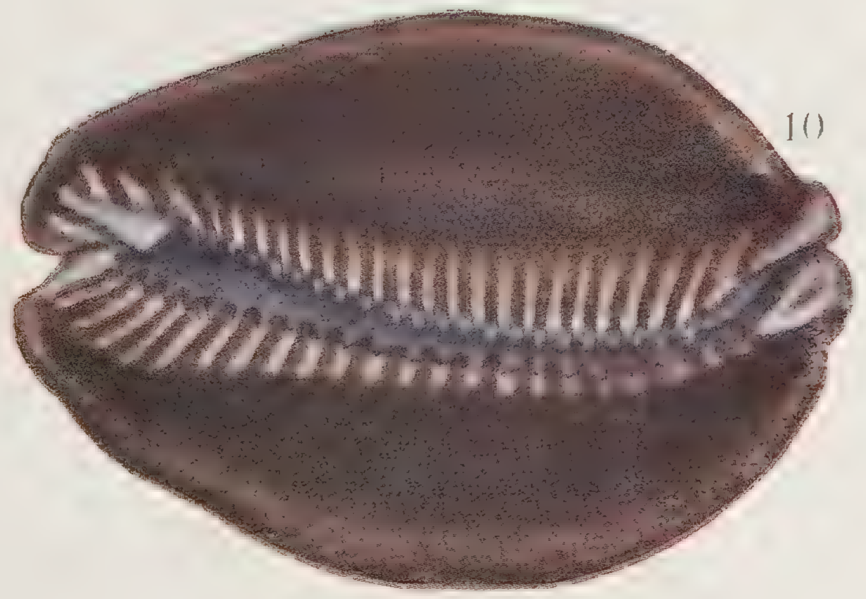
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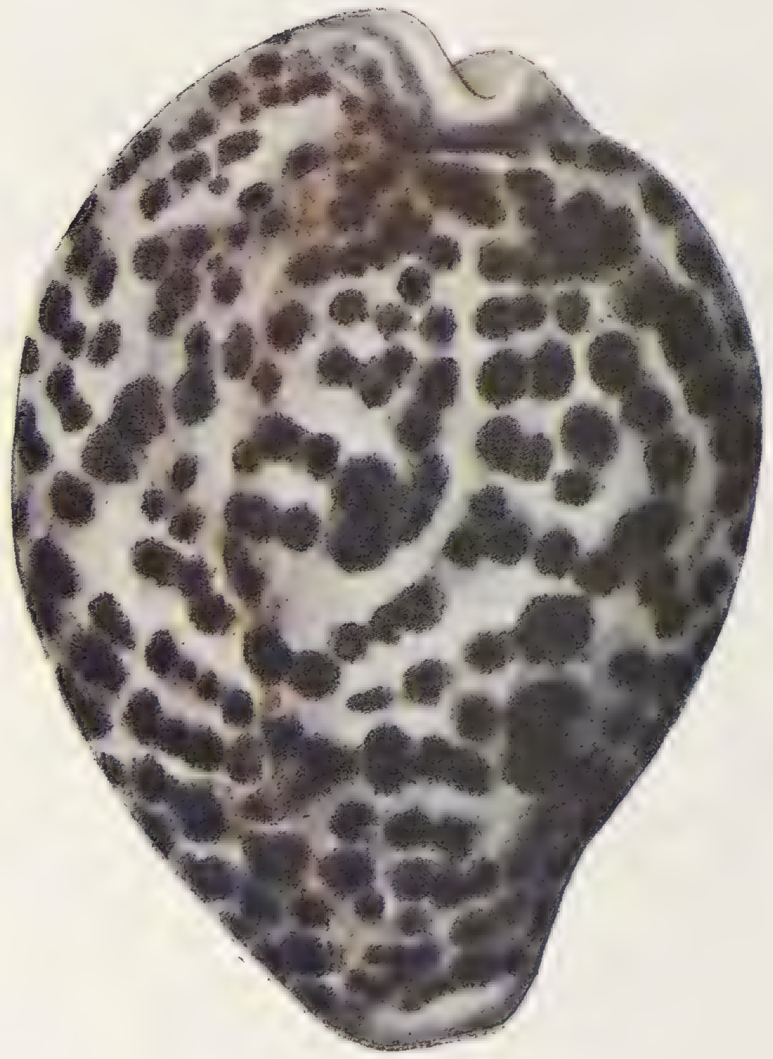
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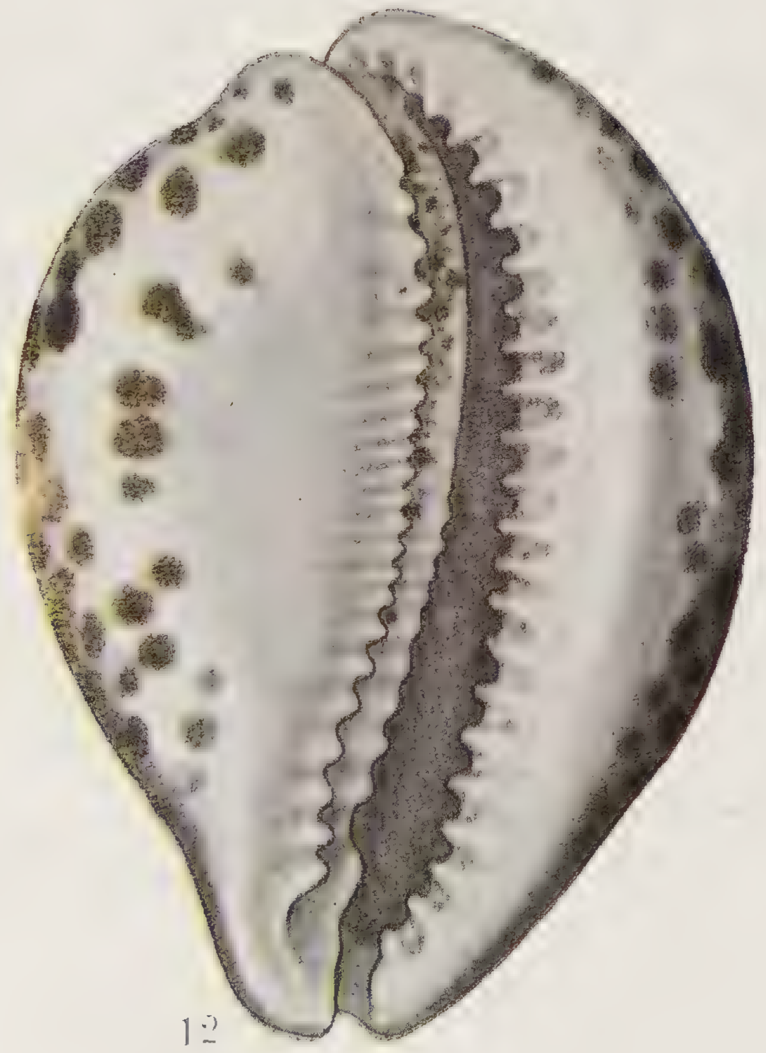
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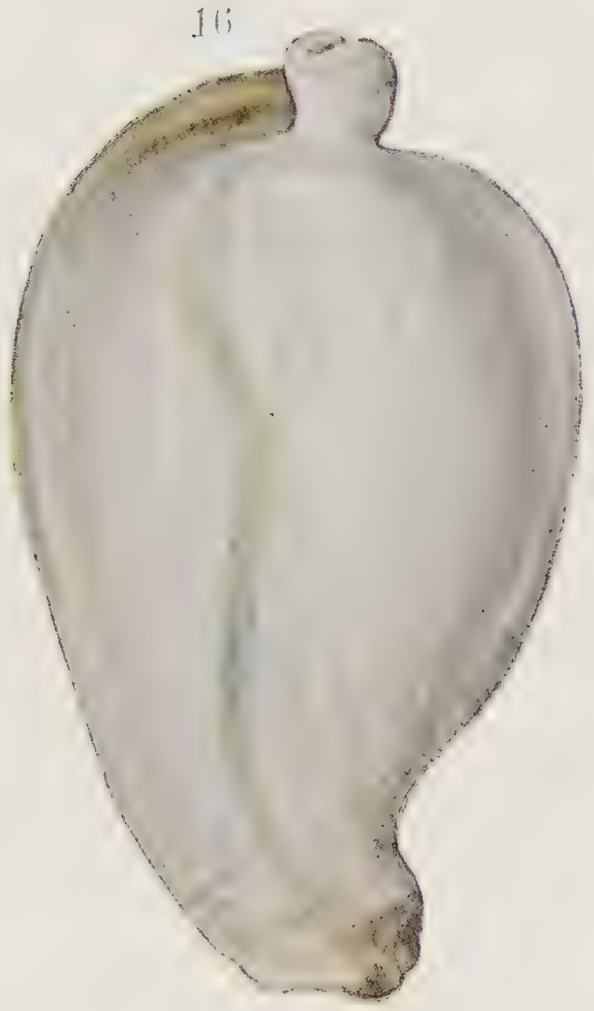
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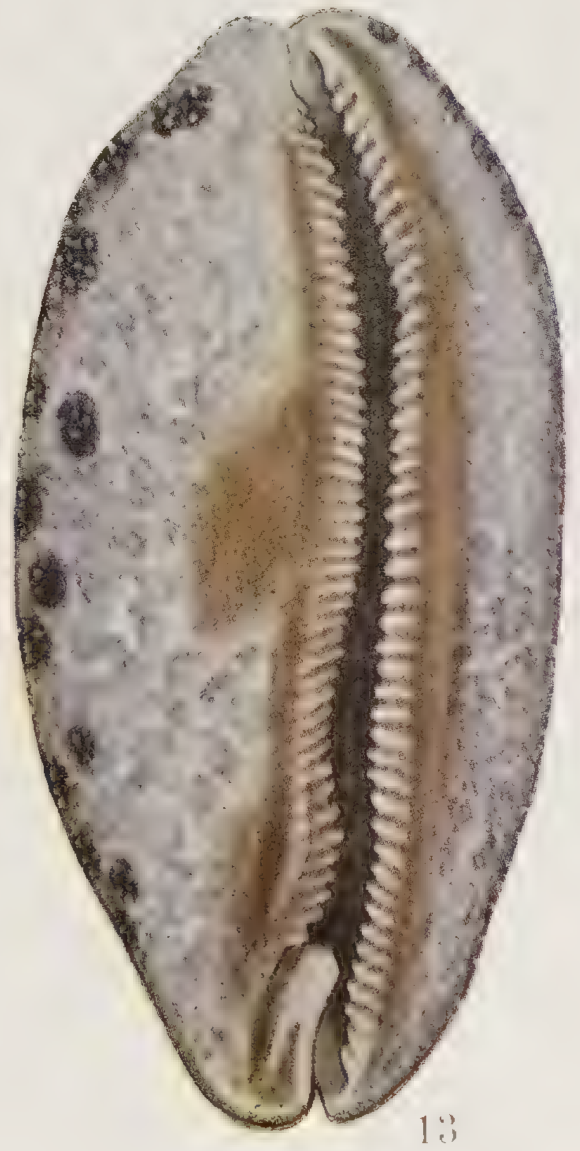
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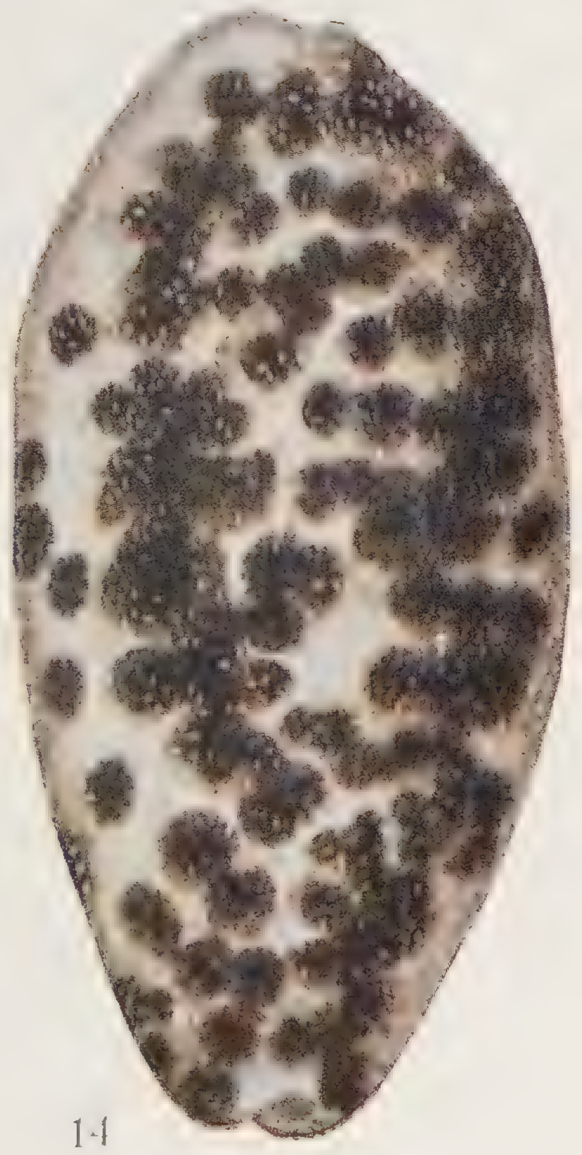
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カコボラ

Cymatium parthenopeum (*Salis*)

(第七十二圖版　第一圖)　×1

貝殼は短き紡錘形をなし，螺塔は圓錐形にして約七階半の螺層あり．螺層の表面には強き螺肋あり．往々一部刻線に分たれて對をなし，或は顆粒の螺列となれる事あり．

貝殼の新鮮なるものは茶褐色の粗毛を有せる表皮を以て覆はれ，縱脹脈及兩脣は暗栗色を帶ぶ．兩脣の齒白く，外脣の內面は柑色を呈す．東海道より九州に至るまで分布す．殼長 120 粍位．

ウラシマ

Phalium pila (*Reeve*)

(第七十二圖版　第二圖)　×1

殼表には緻樣の多くの螺脈を刻し，該脈は縫合の所にて特に太く成る．殼軸には稍々不規則なる橫皺を有す淡褐色の地に栗色の方形紋 4-5 條あるを普通とすれども時に不明なる事あり．殼高 80 粍に達し，本邦の中部及び南部に分布す．

ボウシウボラ

Charonia lampas (*Linné*)

(第七十二圖版　第三圖)　×1

殼質厚く，螺塔低くして螺層は約 7 階を數ふ．螺表には 1-2 列の大なる丸き結節を繞らし，其結節上に 3-4 條の螺肋を有す．白色の地に赤褐色の斑紋を彩る．殼口大にして內脣は平滑，後部に 1 齒を供へ前部には數條の橫襞を有するを普通とす．肉は食用に供せられ，殼は玩具として樂器に造らる．本州九州を經，琉球まで分布す．

ホラガヒ

Charonia tritonis (*Linné*)

(第七十二圖版　第四圖)　×1

殼質重厚にして螺塔高く，螺頂尖り，螺層約 8 階あり．螺層の表面には丸くして廣き螺肋を具へ其間には 2-3 條の螺脈を雜ふ．殼口大にして卵形を呈し，內脣は反曲しチョコレート色の地に白き數多の橫襞を有し，外脣は多くの小彎入を存す．殼表には紅，褐，白等種々の波紋を彩りて美麗なり．

殼長 400 粍に達し，奄美大島，琉球，及臺灣等の暖海に產す．肉は食用に供せられ，貝は往昔陣貝に使用せられ吹奏の要具たりしものなり．

オホナルトボラ

Tutufa bufo (*Bolten*)

(第七十二圖版　第五圖)　×1

殼質重厚にして螺塔低く，螺層は約 7 階あり．螺表には多數の縱走脈ありて膨出す．白色又はクリーム色の地に黃褐色の斑紋を現出す．殼口大にして內脣は平滑なり．貝殼の稚小なるものありては，口內の色彩殊に美麗なる黃紅色帶にて緣取る．殼高約 150 粍に達す．

Cymatium parthenopeum (*Salis*)

"Kakobora"

Pl. LXXII, fig. 1.　×1

Light brown, the varices and lip usually tesselated with chocolate, the columella frequently chocolate between the whitish plications; within the aperture flesh colour. Variable in its proportions, the spire being sometimes short, in others longer.

Frequently, the revolving ribs are partially separated into approximate pairs by an incised line; sometimes they are partially broken up into revolving series of granules.

When the shell is fresh, it is covered by a thin epidermis which, at frequent intervals, develops longitudinal, reflexed ridges terminating, upon there entire length, in long, hair-like digitations. Operculum with terminal initial point.

Phalium pila (*Reeve*)

"Urasima"

Pl. LXXII, fig. 2.　×1

Shell with pretty close, engraved spiral grooves, lip irregularly dentate within; columella rugosely ridged below; flesh or brownish white, with four or five spiral rows of square chestnut spots, sometimes obsolete.

Measures 50 mm. in length. Distribution, central and southern Japan.

Charonia lampas (*Linné*)

"Bôsyû-horagai"

Pl. LXXII, fig. 3.　×1

White, clouded and painted with reddish brown; aperture white within; lip margin painted with brown; columella with white plaits, of which the posterior one is very prominent.

Charonia tritonis (*Linné*)

"Horagai"

Pl. LXXII, fig. 4.　×1

Whitish or yellowish, variegated with semilunar markings of chestnut or chocolate colour; spire pink towards the apex; orange red within the aperture; columella dark chocolate crossed by numerous white wrinkles or plaits; outer lip denticulated at the margin, each denticle terminating in a double revolving band of red brown, or chocolate colour.

Length 250-300 mm.

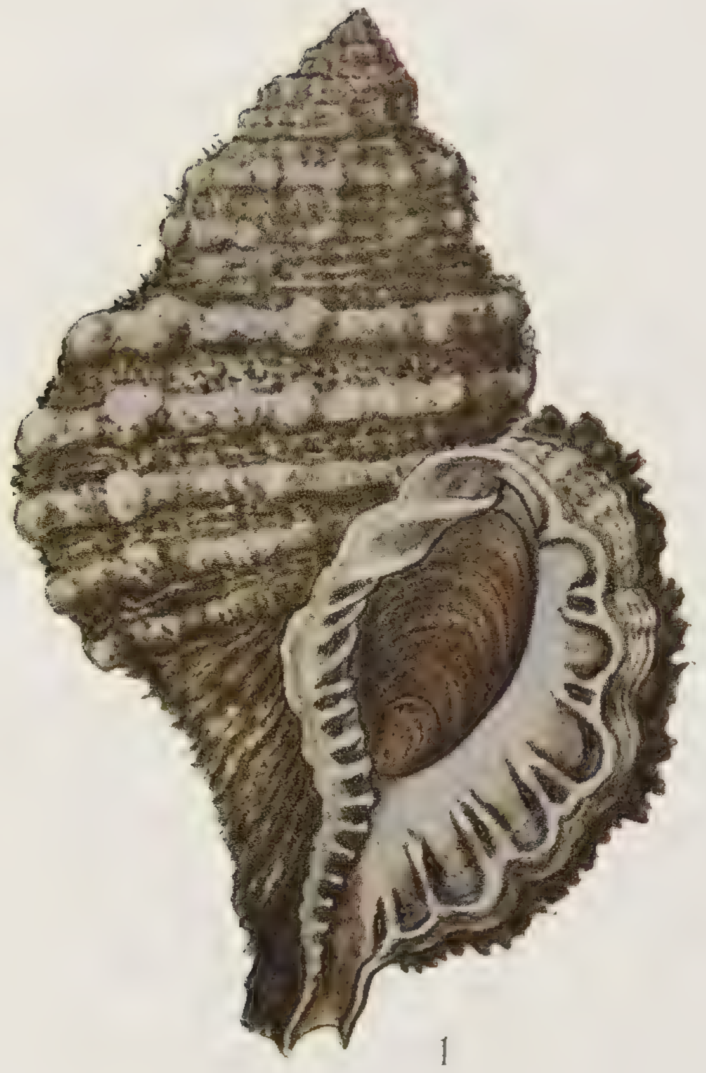
Tutufa bufo (*Bolten*)

"Ônarutobora"

Pl. LXXII, fig. 5.　×1

Whitish or cream-colour, stained and variegated with orange-brown; flesh colour within the aperture; in the young shells orange-red within the aperture and on the tip.

Length about 150 mm.



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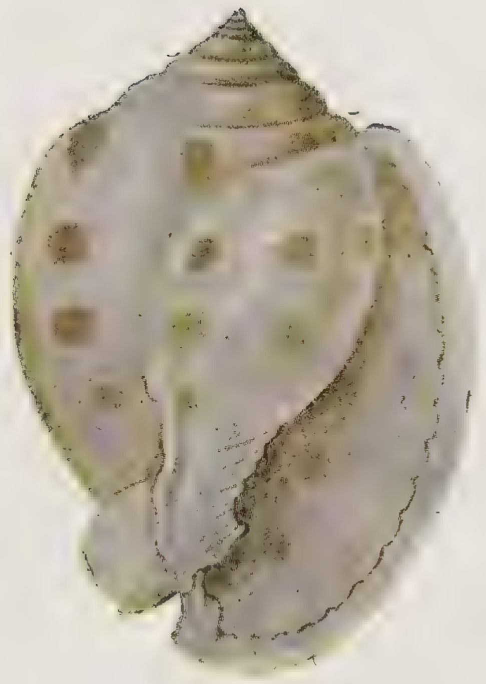

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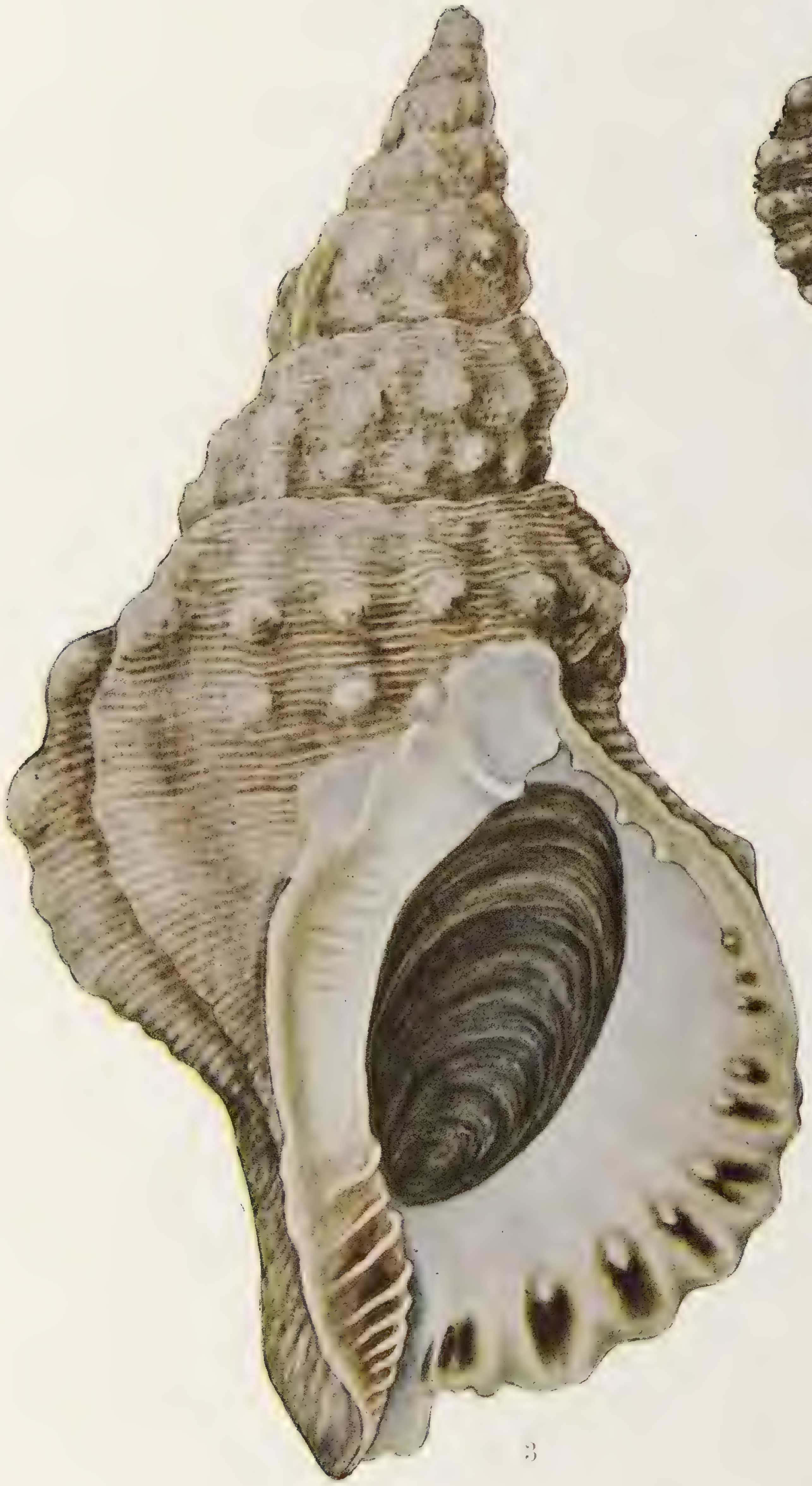

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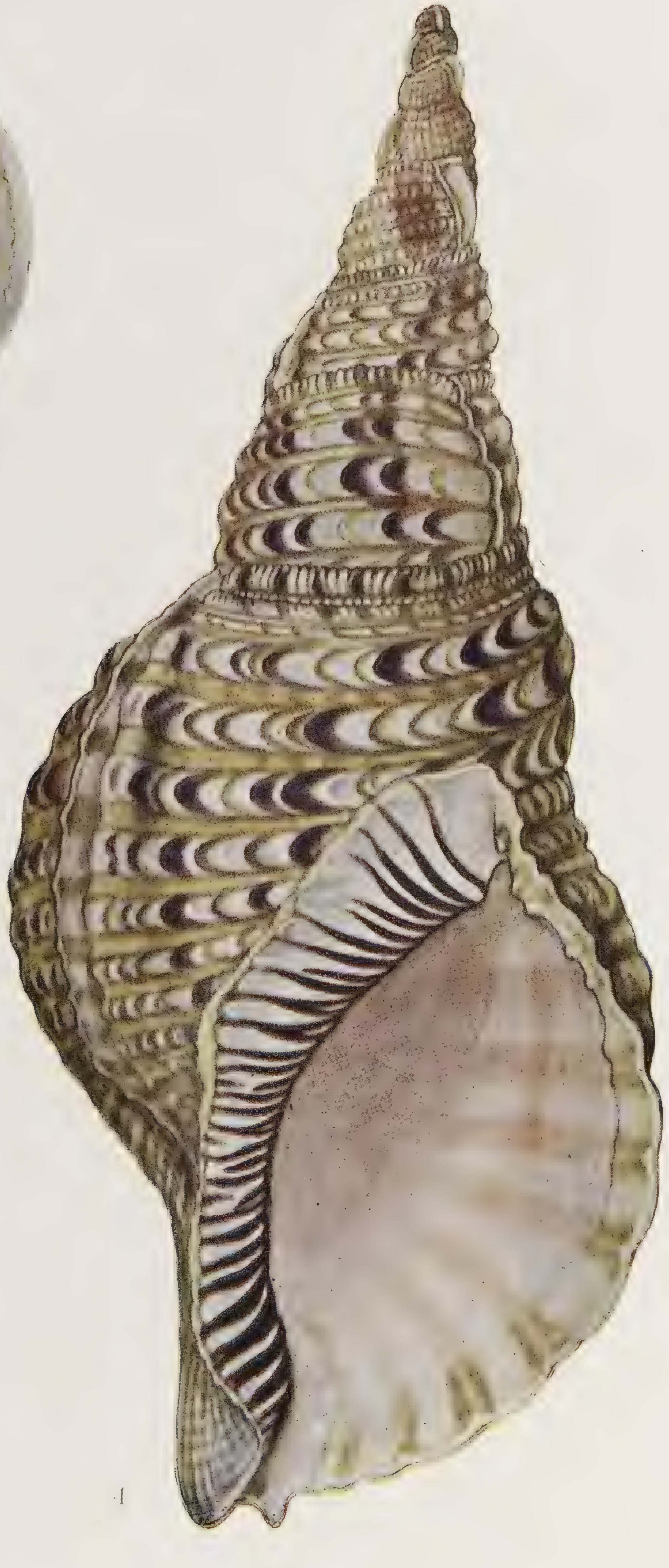

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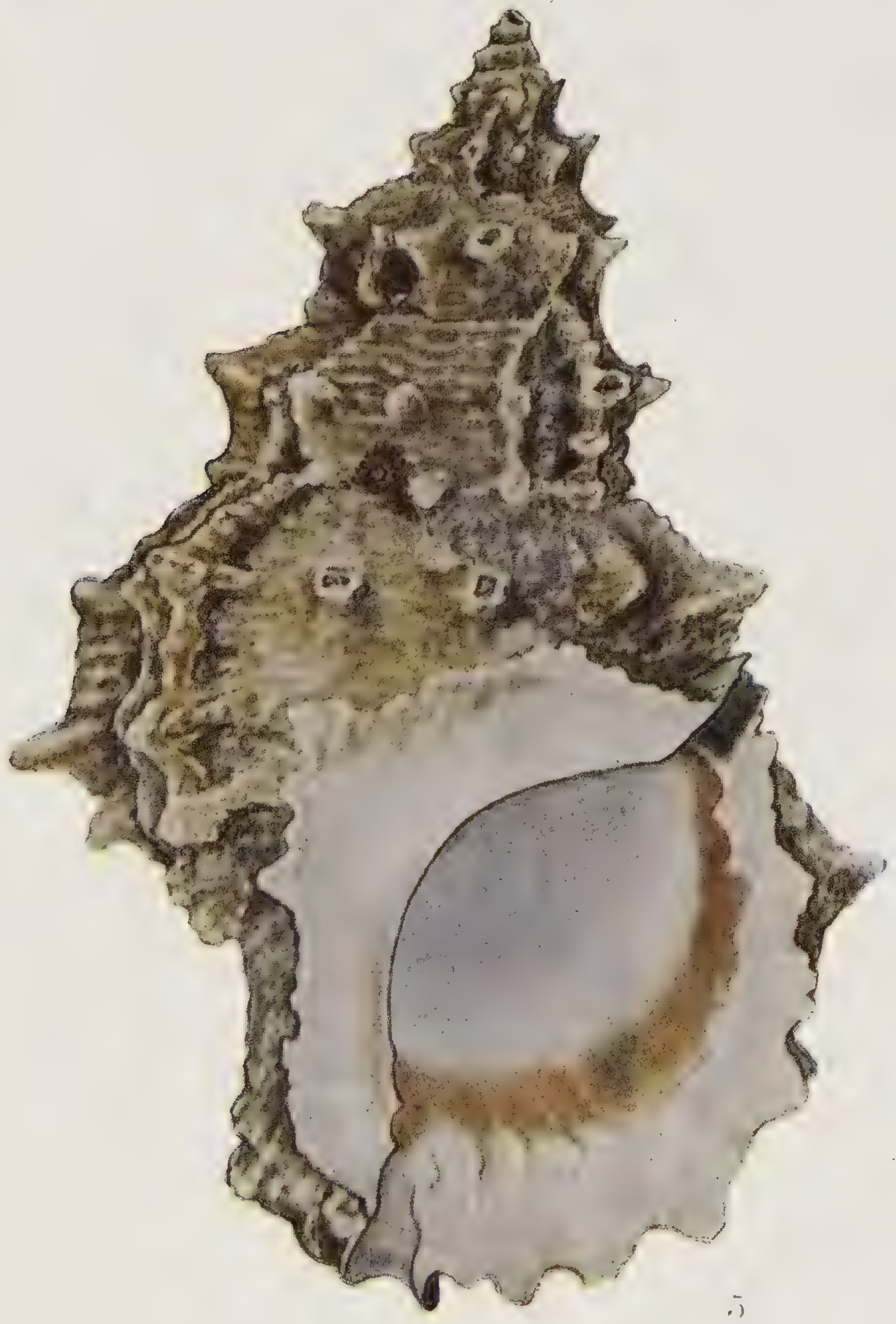


5

NATIONAL MUSEUM

イボニシ

Thais clavigera (*Küster*)

カラニシ

（第七十三圖版　第一圖）　×1

小形の卷貝にして表面に圓き結節を有し，外唇稍薄く內唇に齒なし．殼色は淡褐或は黑靑色にして，多少の黃白點を交ふる事あり．殼口は黃褐色を呈す．

殼長 30 粍餘にして干滿潮線附近の岩礁に棲息し四月より八月に至る間產卵す．卵囊は細長き圓筒狀をなして多數岩盤等に附着せしむ．殆んご全國的に分布し「レイシ」*Thais bronni* ご共に「カキ」の害敵こなるものなり．漁村に於ては食用こせり．

ホソスジテツボラ

Thais persica (*Linné*)

（第七十三圖版　第二圖）　×1

殼表平滑にして高さ 70 粍餘あり．螺層は約 4 階よりなる．體層は稍大にして黑褐色を呈し，白及暗褐色を交ふる螺肋あり．殼口は長卵形にして內唇は白く外唇は淡紅色を呈し，褐色の條線あり．本邦南海に分布す．

テングガヒ

Chicoreus ramosus (*Linné*)

（第七十三圖版　第三圖）　×1

大形なる貝殼にして，殼表及殼口は白色，兩唇殊に內唇は肉色を彩り，縱脹脈上には多數の葉狀突起を有するを以て頗る壯觀なり．

本邦大島，琉球等の暖海に棲息し最も大なるは 250 粍に達す．

アクキガヒ

Murex troscheli (*Lischke*)

（第七十三圖版　第四圖）　×1

多數の棘を有する卷貝にして，高さ 170 粍に達するものあり．螺層 10 階位にして，縱脹脈上の棘は「ホネガヒ」に比し，太く長く，其數少し．殼色淡黃色にして螺肋は紫褐色を呈す．

房州以西の暖海凡 10–40 米の砂泥底に棲息し手繰綱，延繩等にて屢々採集せらる．

ホネガヒ

Murex triremis (*Perry*)

（第七十三圖版　第五圖）　×1

多數の突起を有する卷貝にして，甚だ長き水管溝を有せり．螺塔稍高く各螺層脹れ，縫合は溝をなせり．螺層には全體にて 3 條の縱脹脈ありて，長き棘並列せり殊に外唇下の嘴上にあるもの最長なり．長棘の間には短棘ありて方向を異にせり．

殼は淡黃褐色にして，東海以西の暖海に棲息す．

アカニシ

Rapana thomasiana (*Crosse*)

（第七十三圖版　第六，七圖）　×1

殼質堅固なる圓き卷貝にして，大形なるものは高さ 150 粍あり．螺塔低く，體層甚だ大にして，結節を有する 3 列の螺肋あり．殼表は淡褐色の地に暗褐色の縱紋を有すれご老成するに至れば殆んご判然せず．殼口は大形にして美しき鮮紅色を呈せり．

本州一般に分布し干潮線より 20 米の深さに至る砂泥底に棲息し，五月より八月に至る間產卵す．卵囊は長刀酸漿こ稱し婦女子に用ひらる．肉は食用に供す．

Thais clavigera (*Küster*)

"Ibonisi"

Pl. LXXIII, fig. 1.　×1

Revolving ribs rounded, raised into round nodules superiorly, outer lip thin, not dentate within.

Colour varying from very light brown to dark chocolate, more or less mottled with white, especially the tubercles. Commonly occurs in rocky shores along coast of Japan.

Thais persica (*Linné*)

"Hososuzitetubora"

Pl. LXXIII, fig. 2.　×1

Brown with narrow revolving zones of white alternating with dark chocolate; aperture bluish or pinkish, with interrupted narrow revolving brown lines upon the interior of the outer lip.

Chicoreus ramosus (*Linné*)

"Tengugai"

Pl. LXXIII, fig. 3.　×$\frac{2}{3}$

The shell is distinguished from its relatives in being more pyriform in shape, the spire shorter, the lips tinged with rose-pink.

It is the largest species of the genus, reaching sometimes 250 mm. in length. Young specimens varying from 80-100 mm. are considerably more frondose.

Murex troscheli (*Lischke*)

"Akki-gai"

Pl. LXXIII, fig. 4.　×1

The shell resembles *Murex triremis*, but differs in spine which adorns the longitudial striae, it is larger and longer than the former, but less in number. Colour of the body is light yellowish, revolving lines are purplish brown. Inhabits about 10–40 metres in sandy bottoms; distribution central and southern Japan.

Murex triremis (*Perry*)

"Honegai"

Pl. LXXIII, fig. 5.　×1

The distinguishing character of this species, is a large number of long, parallel, curved spines which adorn the canal and lower portion of the body, with alternating, recured, smaller spines.

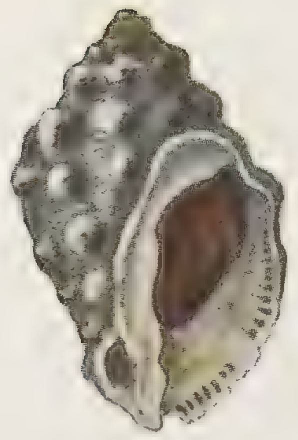
Distribution, central and southern Japan, found in deep, sandy bottoms of 20-50 metres.

Rapana thomasiana (*Crosse*)

"Akanisi"

Pl. LXXIII, figs. 6, 7.　×1

Shell spirally ribbed or striæ; growth lines smooth or scaborously foliated; shoulder of whorls flattened. Light brown, usually longitudinally flamed and obsolately spirally spotted with darker brown. Internally white or orange coloured, the lip sulcated. Fig. 7. egg capsules.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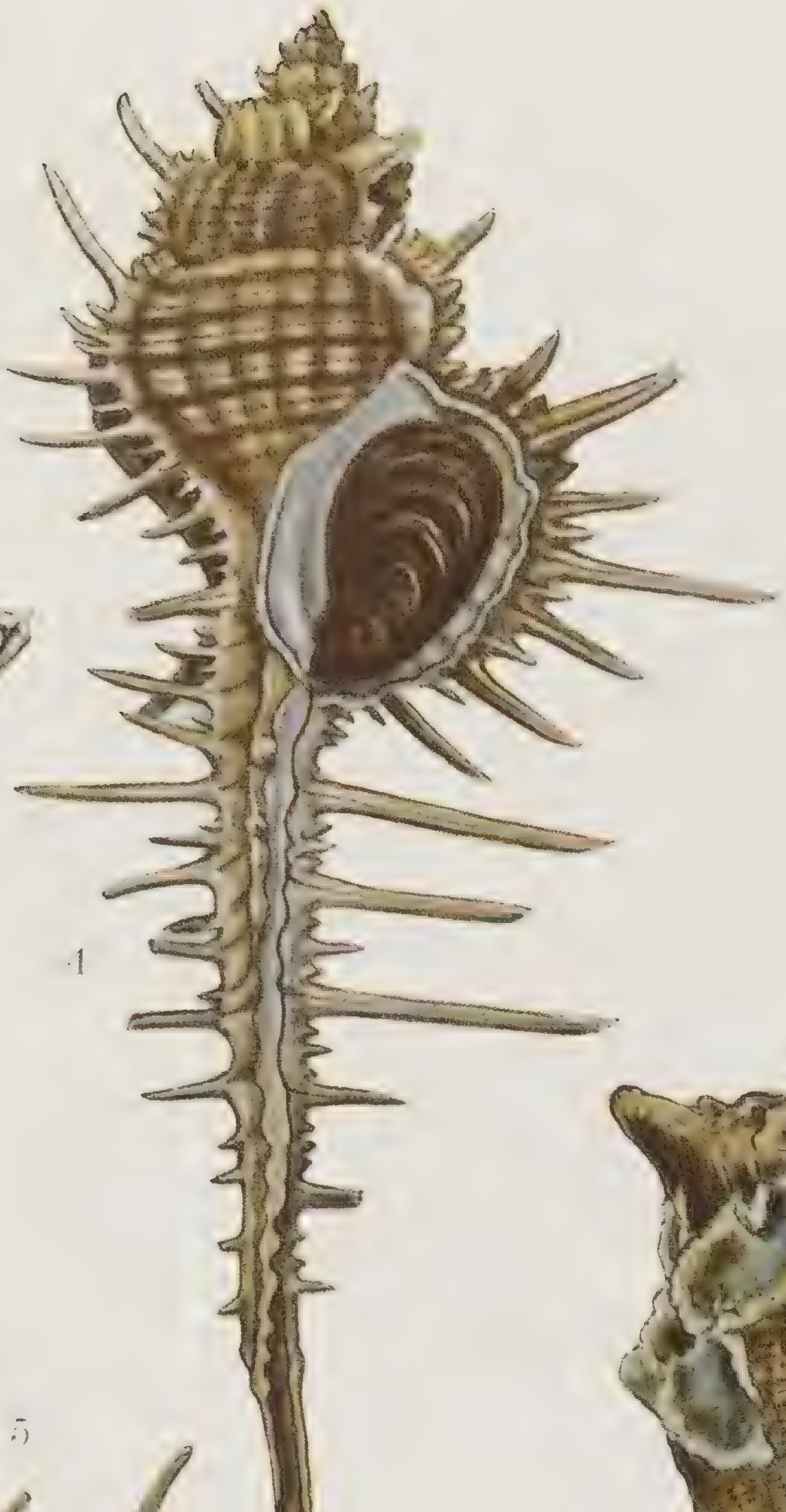
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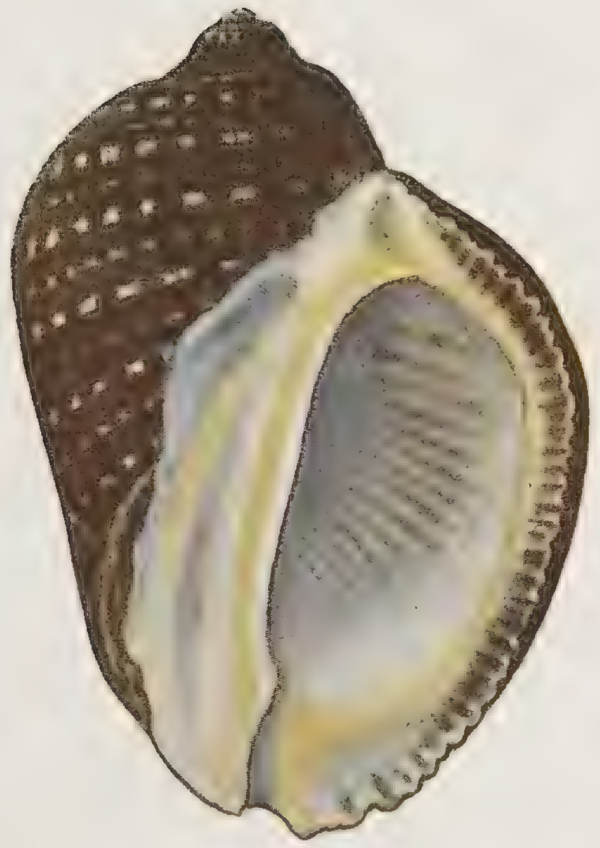
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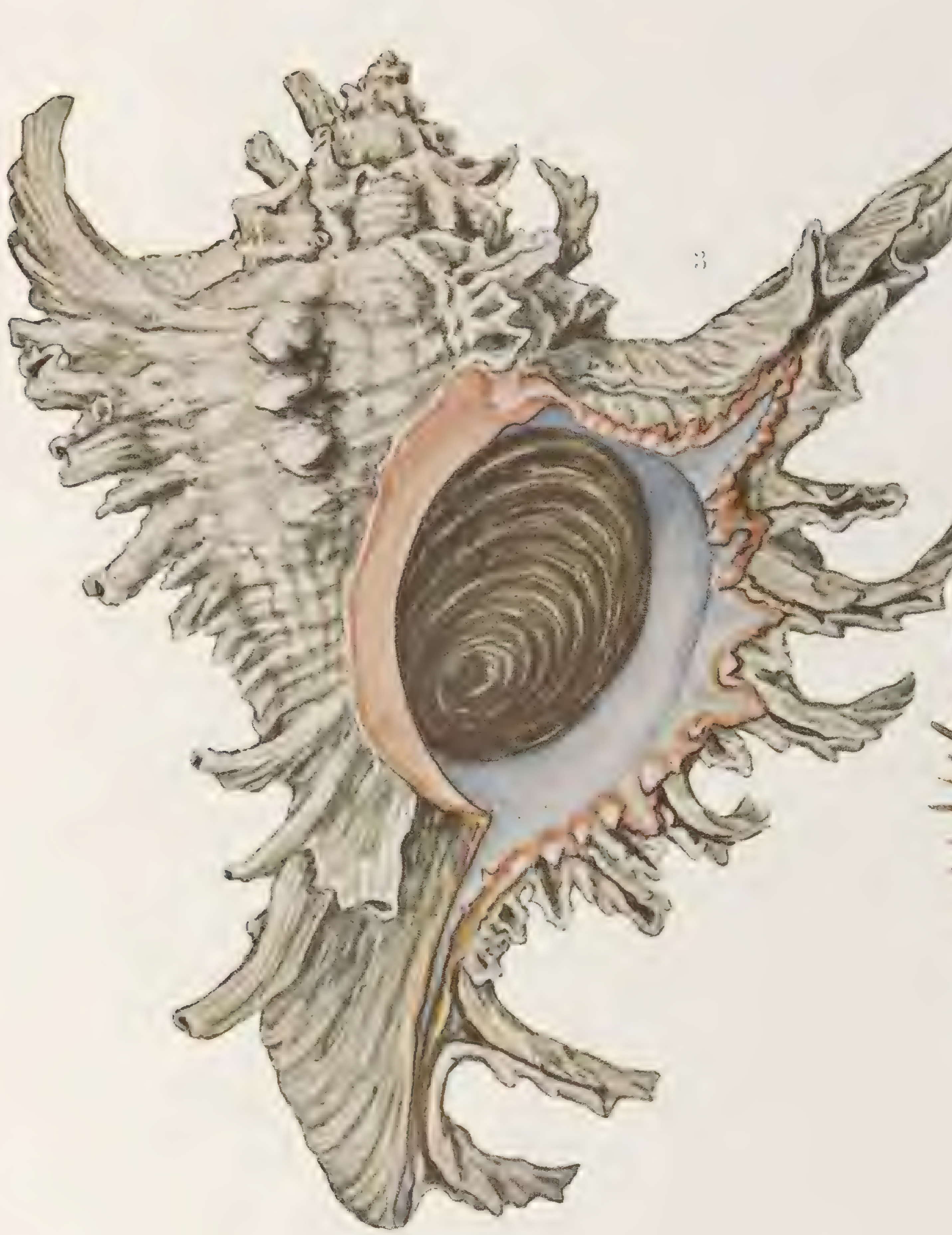
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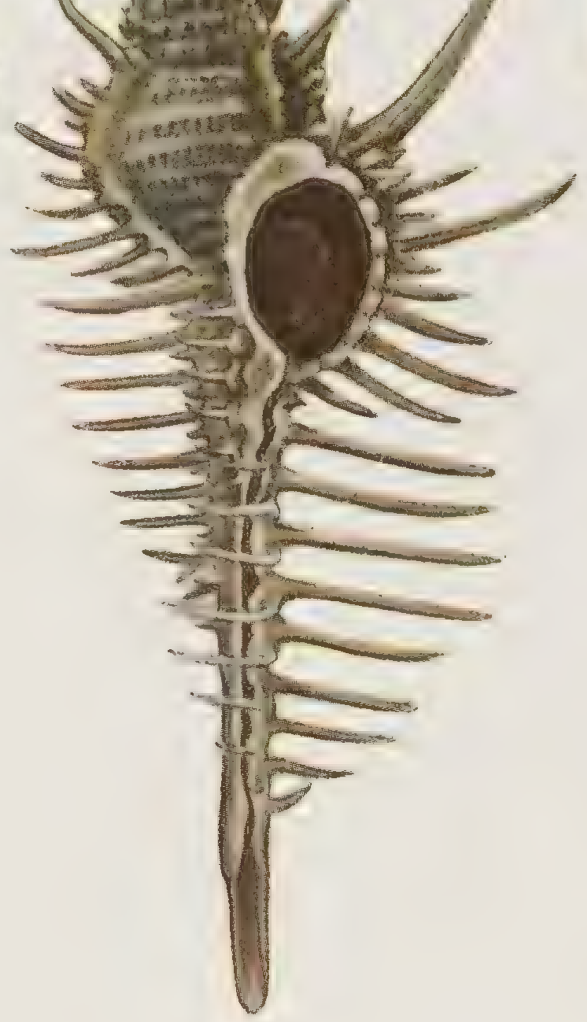
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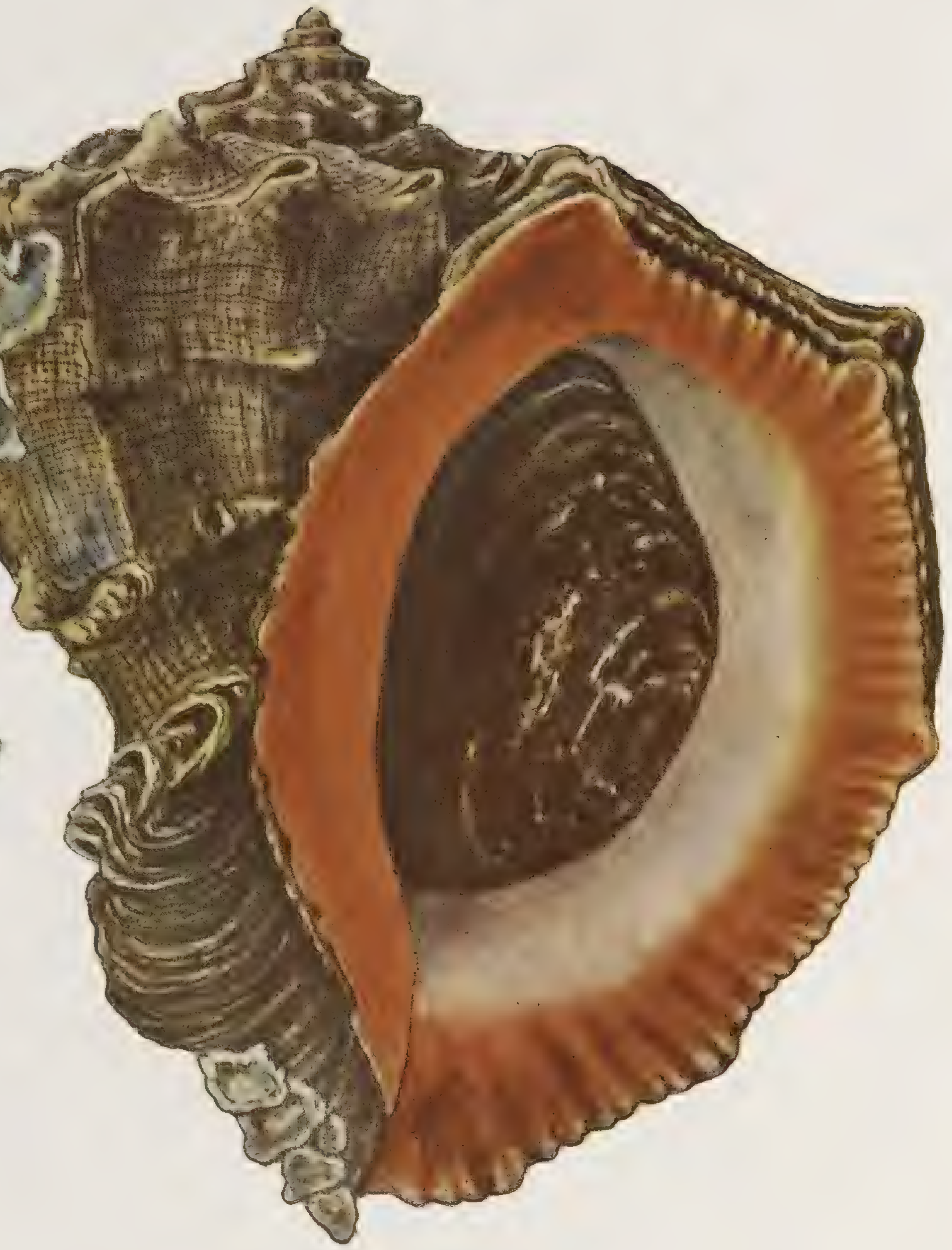
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7

ショクコウラ

Harpa conoidalis *Lamarck*

（第七十四圖版　第一，二圖）　×1

楕圓形の卷貝にして，螺塔低し．螺層は殼口に近付くに從ひ急に大きさを增加し，體層頗る大なり．殼面は甚だ光澤に富む．卽ち此類の動物は甚だ大なる足を有し，殼面を外套膜にて覆ひ常に石灰質を分泌する故に生時の貝殼は美麗なり．體層に縱肋を有し，背面縫合下に於て銳き突起を有す．

殼は淡肉色にして，肋間には褐色の半圓狀雲紋の模樣を飾り，縱肋上には明暗交互せる栗色部を有す．殼口大にして前後兩溝共に深し．本邦南海に棲息し殼長90粍に達す．

コロモガヒ

Cancellaria spengleriana *Deshayes*

（第七十四圖版　第三圖）　×1

稍卵形の卷貝にして短かく，稍尖れる螺塔あり．螺層は7-8層にして，其最初の2層は滑かなり．體層及次層の表面には肩角を有し，肩角には小さき刺狀結節を有す．この結節を含む縱肋凡10-15條あり．内唇は滑かにして，通常3個時に4個の襞あり．外唇緣は齒狀をなし螺肋を有せり．

殼色淡褐色にして，肩部の所々に栗色斑を有す．本邦，本州及南海の沿岸に普通に見らるゝ種なり．

ジュドウマクラ

Oliva erythrostoma (*Meuschen*)

（第七十四圖版　第四，五圖）　×1

圓筒形の貝殼にして高さ約80粍あり．殼頂は稍銳きも螺塔低し．各螺層は肩角を有し，肩角の上部は深き溝をなす．全表面琺瑯質を被り光澤強く甚だ美麗なり．色彩淡黃或は淡紅色にして，暗褐色の不規則形の斑紋あり．殼口は美しき肉色を呈す．

南方暖海の稍深き砂地に埋棲す．殼は裝飾に用ひらる．

オニニシ

Hemifusus tuba (*Gmelin*)

（第七十四圖版　第六圖）　×1

紡錘形をなせる稍大形の貝殼にして，長さ200粍あり．螺層は約7階にして體層は頗る長大なり．全體に淡黃褐色の表皮を被る．殼口長大にして外唇緣には不規則なる皺を有し，上緣に1突起あり．殼口內面は肉色にして光澤あり．「テングニシ」に酷似す．

本州より九州に至る稍深き砂泥底に棲息し，五，六月頃產卵す．肉は食用に供す．

ナガニシ

Fusinus perplexus nagasaki (*Grabau*)

（第七十四圖版　第七圖）　×1

細長き貝殼にして螺塔頗る高く，螺層は約9階あり．殼は白色又は淡黃を帶び汚黃色の表皮を被る．螺層甚だ脹れ縱肋は肩部に於て隆起を作れるものと作らざるものあり．赤褐色の縱線を有する事あり．殼口は楕圓形にして，前溝甚だ長し．

本邦到る所に分布し10米—20米附近の砂泥底に棲息し六，七月頃產卵す．其卵囊は海酸漿にして，之を得る爲畜養する所あり．肉は食用となす．

イトマキヒタチオビ

Fulgoraria rupestris (*Gmelin*)

（第七十四圖版　第八圖）　×1

亞紡錘形の貝殼にして螺層は約6階，胎殼は大にして滑かなり．螺層には弱き肩角を具へ體層に3，他層に2帶の細き屈折せる褐色帶を有せり．內唇は强き襞を有す．

本邦中部及南方深海に棲息する多からざる貝殼なり．殼長145粍に達す．

ヒタチオビ

Fulvoraria (Psephaea) prevostiana *Crosse*

（第七十四圖版　第九圖）　×1

稍紡錘形の貝殼にして，高さ180粍前後の貝殼を有す．胎殼は重餠狀を呈し，螺塔高し．螺層稍脹れ，多數の縱肋を有し，又細かき螺脈あり．殼は赤煉瓦色を呈す．殼口內面は淡赤褐色を呈す．

北海道より相模灣等に至る深海底に棲息す．

Harpa conoidalis *Lamarck*

"Syokkôra"

Pl. LXXIV, figs. 1, 2.　×1

Spire more elevated and shoulder of body-whorl more sloping than in the preceding species; the intercostal painting is similarly festooned, but usually not so distinctly, revolving bands on the ribs are defined either on the shoulder only, occasionally elsewhere or throughout, by dark chocolate borders. Distribution, southern Japan.

The genus *Harpa* have a very large foot with the front crescent-shaped, and divided by deep lateral fissures from the posterior part.

Cancellaria spengleriana *Deshayes*

"Koromogai"

Pl. LXXIV, fig. 3.　×1

Form suboval with a short but pointed spire. The whorls number about eight, of which the first two are embryonal and smooth, the others angulated, with the surface above the angle somewhat sloping or nearly horizontal, while the surface below is nearly perpendicular, so that the angle may be obtuse or sometimes nearly right-angled. The number of longitudinal ribs varies from ten to fifteen.

The olique folds of the columella are normally three in number, but there are often four. The lip outside of the folds is more or less tubercular with rounded and elongated elevation. The outer lip is denticulate at margin with many distant spiral threads within.

Colour of shell light brownish, commonly living in central and western Japan.

Oliva erythrostoma (*Meuschen*)

"Zyudômakura"

Pl. LXXIV, figs. 4, 5.　×1

Shell cream coloured, very light yellowish or pink, closely reticulated by zigzag chestnut markings, usually forming a superior and a median band of darker reticulations; aperture white or light flesh colour.

Hemifusus tuba (*Gmelin*)

"Oninisi"

Pl. LXXIV, fig. 6.　×1

The shell is distinguished by being white under a light yellowish brown epidermis; by the flexuous, wider, open canal, which is widened gradually into the lower portion of the aperture. Fawn-yellow to yellowish red; interior yellowish flesh-colour.

Distribution, central to southern Japan.

Fusinus perplexus nagasaki (*Grabau*)

"Naganisi"

Pl. LXXIV, fig. 7.　×1

Shell white or yellowish, rather thin. Typically the shoulder and nodules are well developed, but they gradually disappear in a series of individuals until in some forms they are entirely absent, and the body-whorl is rounded and simply sculptured with revolving striæ. Commonly living in central and southern Japan. Length about 100-120 mm.

Fulgoraria rupestris (*Gmelin*)

"Itomakihitatiobi"

Pl. LXXIV, fig. 8.　×1

An elegant smooth species; rather thin, with first volution of the papillary apex lateral instead of terminal. Reddish flesh colour longitudinally marked with zigzag chestnut streaks, sometimes forming three obscure bands. Length about 140 mm.

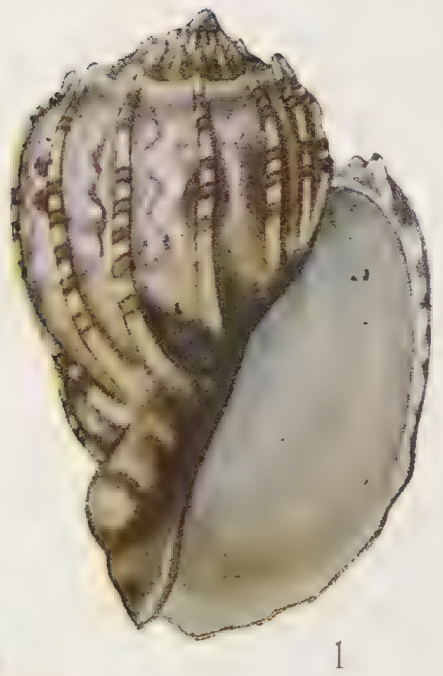
The swollen beak-like apex, the initial whorl of which is lateral, is a curious feature of this group, which indicates some important difference in the development of the Mollusk.

Fulvoraria (Psephaea) prevostiana *Crosse*

"Hitatiobi"

Pl. LXXIV, fig. 9.　×1

Shell oblong-fusiform; spire moderatly elongated, terminated by a papillary summit with the apex lateral, instead of central and vertical as is usual in spiral shells; surface, plicate longitudinally, crossed by engraved revolving lines; columellar plaits six or seven.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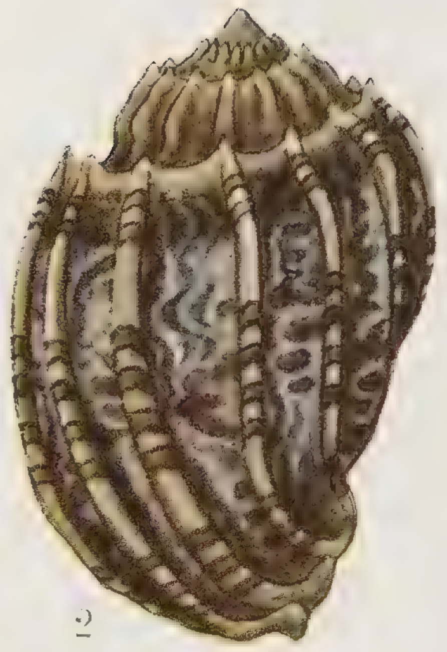
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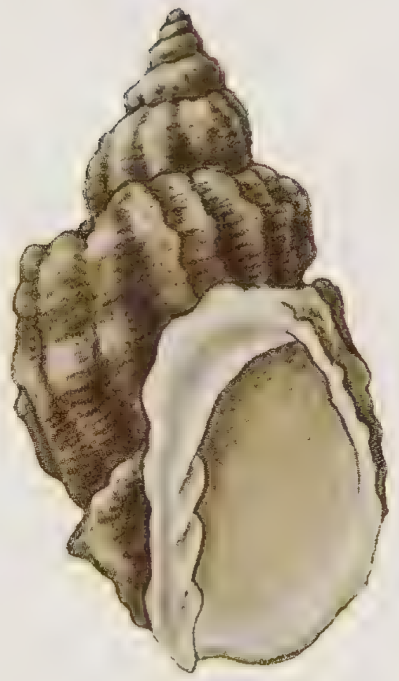
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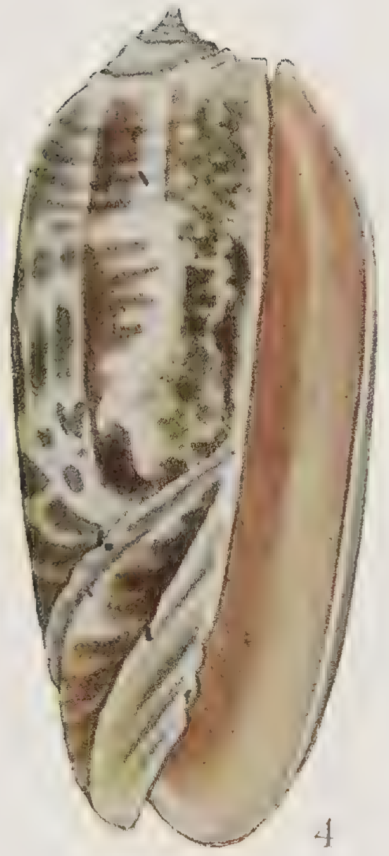
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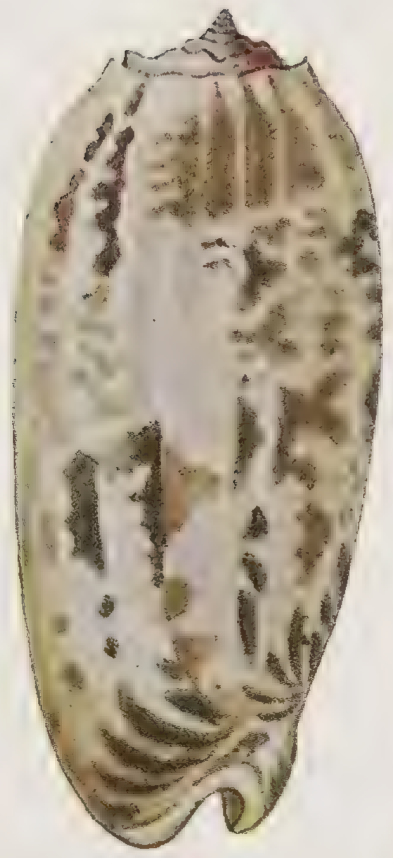
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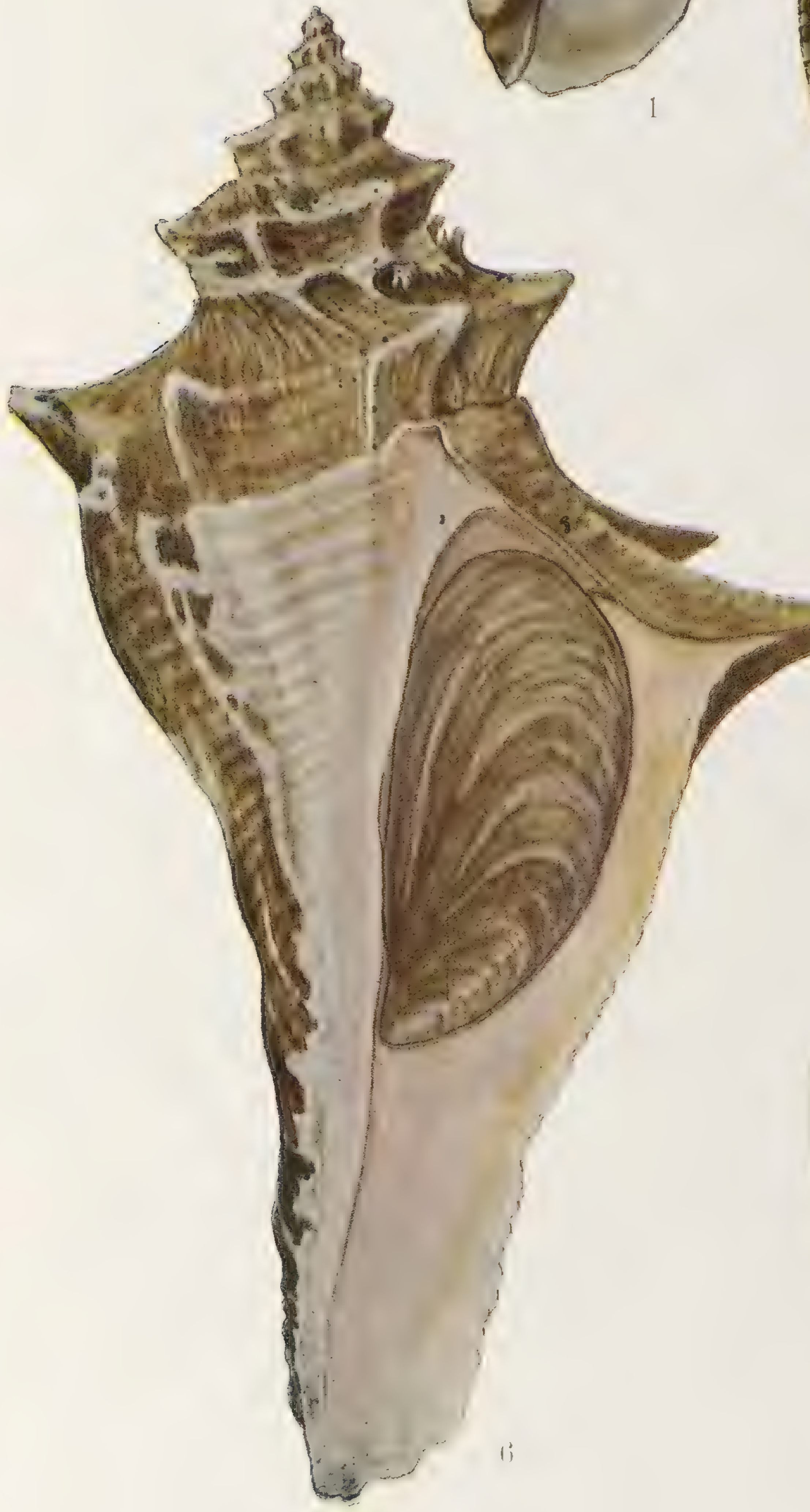
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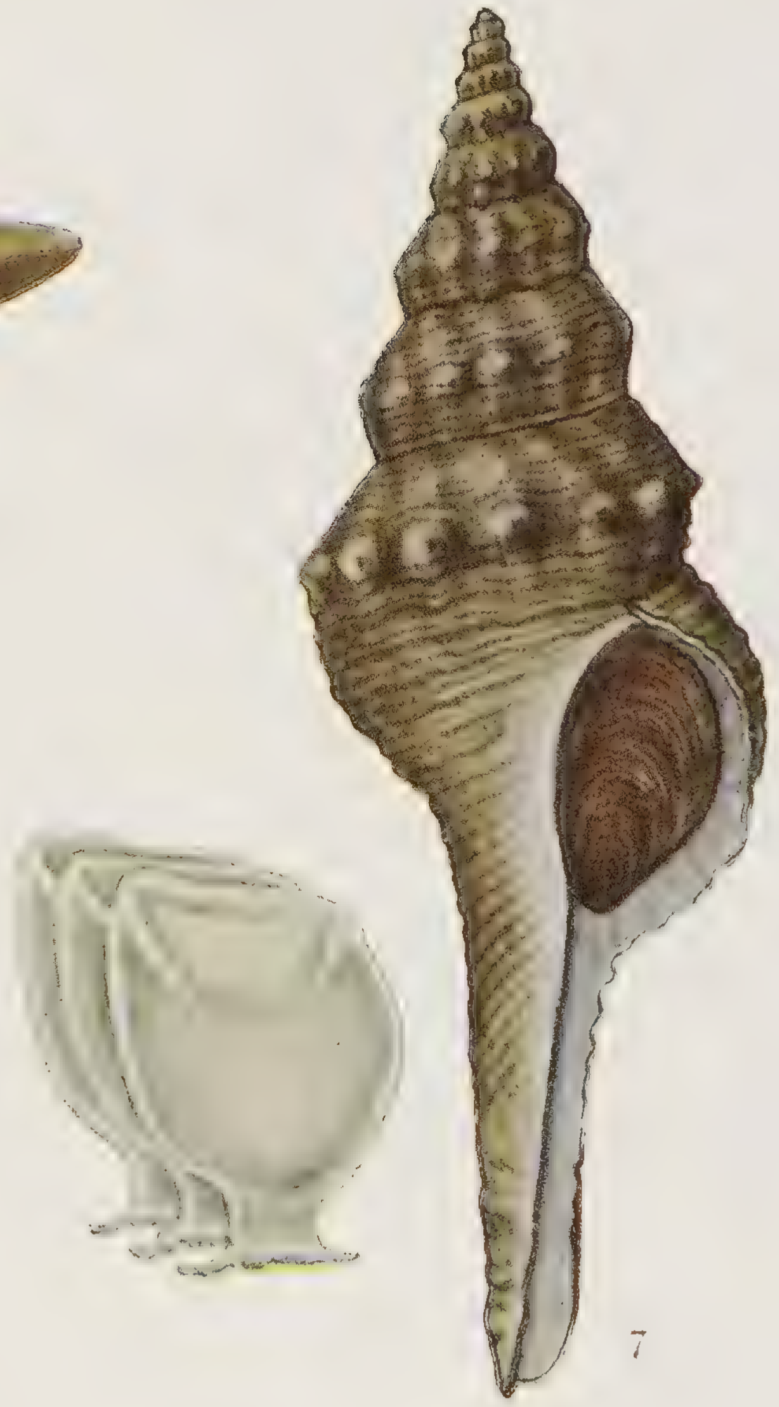
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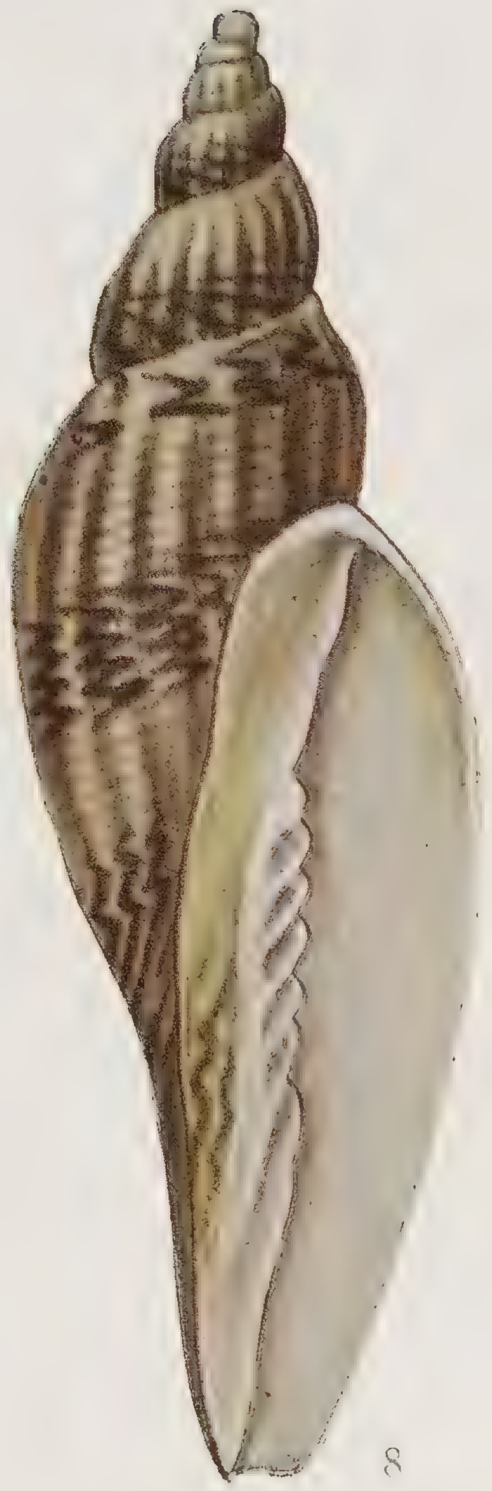
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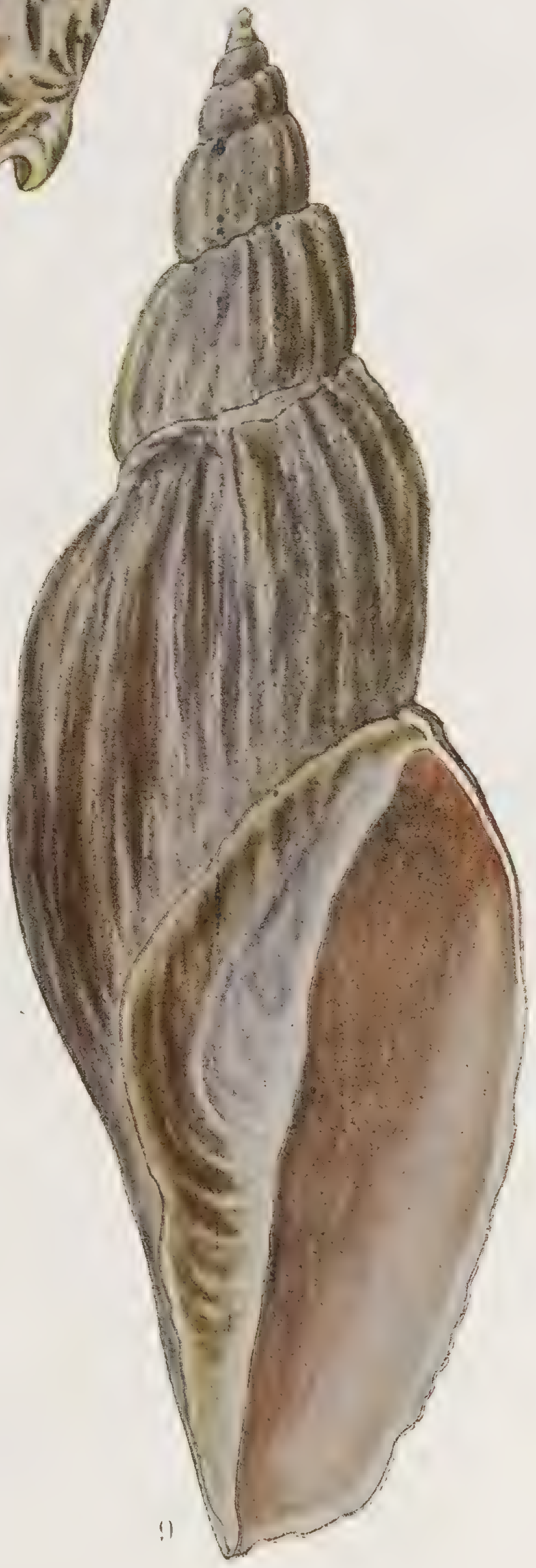
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クロミナシ

Conus marmoreus *Linné*

（第七十五圖版　第一圖）　×1

殼形倒圓錐形にして，殼質厚し．螺塔極めて低く，結節を有す．殼口狭長にして，內唇外唇は平行せり．但し底部に於て凹めり．

殼は白色又は淡紅色の地に濃栗色，或は濃褐色の網目狀をなせる斑紋を呈せり．殼長60粍餘にして南方暖海に棲息す．

ムシロイモモドキ

Conus rattus taitensis *Hwass*

（第七十五圖版　第二圖）　×1

貝は黃褐色にして時に灰色を交へ，又栗色の橫線を有し，白斑點あり．肩部には汚斑紋あり．殼長40粍位の比較的小形なる種にして本邦南海に棲息す．

マダライモ

Conus ebraeus *Linné*

（第七十五圖版　第三圖）　×1

比較的小形の芋貝にして，殼長は殼幅に對し割合に短かし．白色又は淡黃色の地に濃褐色の列をなせる斑點を有し凡4列をなせり．殼口內は淡紫色を呈す．殼長40粍前後にして南方暖海に棲息す．

ハルシヤガヒ

Conus tessullatus *Born*

（第七十五圖版　第四圖）　×1

貝殼は稍厚く，倒圓錐形をなす．白色の地に赤橙色の矩形をなせる斑點は橫列を呈せり．底部は淡紫色の色彩あり．本邦東海地方より南方に至る淺海砂底に棲息す．殼長55粍前後なり．

タガヤサンミナシ

Conus textile *Linné*

（第七十五圖版　第五圖）　×1

貝殼稍芋形にして細長く，一見磁質の如き模樣を呈せり．卽黃褐色の地に濃褐色の縱線波狀に縱走し，其途中に於て，三角形をなせる白色紋不規則に出現す．之は肩部或は中央部に多く，連續して橫帶狀をなせり．殼口は白色なり．殼長80粍に達し南方暖海に棲息す．

コモンイモ

Conus arenatus *Hwass*

（第七十五圖版　第六圖）　×1

殼質稍厚く，肩部に低き結節あり．黑褐色の不規則なる斑紋を有し更に小褐色點散在す．殼口は常に淡紅色を呈す．殼長55粍餘あり．

クロフモドキ

Conus litteratus pardus (*Bolten*)

（第七十五圖版　第七圖）　×1

大形なる芋貝にして殼長120粍餘に達す．螺塔甚だ低し．殼質重厚，磁質樣にして白色又は淡黃色の地に不定形をなせる黑紫色の斑點多數に橫帶をなせり．殼口狹長にして白し．南方暖海地方に棲息す．

ベツカフイモガヒ

Conus fulmen *Reeve*

（第七十五圖版　第八圖）　×1

稍細長き芋貝にして，生時は黑褐色の表皮を被れり．紅紫色の地に紫褐色の縱線あり，尙不規則の斑紋を交ふ．殼口は淡紫色なり．殼頂は紅色を呈す．

普通に現はるゝ芋貝にして淺海4-5尋の砂泥底に棲息す．本州及四國，九州に分布し，殼長70粍前後なり．

カバミナシ

Conus vexillum *Gmelin*

（第七十五圖版　第九圖）　×1

大形なる種なれども稍殼質薄く，螺塔は稍高く，白色及褐色の不規則なる模樣を呈せり．殼表淡褐或は濃褐色の縱走線密に走り，中央に白色の橫帶1條存せり．殼長120粍に達し暖海に棲息す．

Conus marmoreus *Linné*

"Kurominasi"

Pl. LXXV, fig. 1.　×1

Shell thick, obconic, whorls enrolled upon themselves, the spire short, smooth; aperture elongated, narrow, the margins parallel, truncated at the base.

White or pinkish white, with chocolate or chestnut reticulations, so arranged as to expose the white in rounded triangular large spots. Length 60 mm.

Conus rattus taitensis *Hwass*

"Musiroimo-modoki"

Pl. LXXV, fig. 2.　×1

Shell yellowish brown or ash colour, often with fine close chestnut revolving lines, with large white spots and maculations usually forming an interrupted central band and another at the shoulder. Length 40 mm.

Conus ebraeus *Linné*

"Madara-imo"　×1

Pl. LXXV, fig. 3.

Shell white usually with two or three light yellowish bands, marked with very dark chocolate revolving spots.

Conus tessullatus *Born*

"Harusya-gai"

Pl. LXXV, fig. 4.　×1

Shell white, with reddish orange spots and short lines in revolving series, forming, by crowding together, two irregular bands; base stained with light violet. Distribution central and southern Japan.

Conus textile *Linné*

"Tagayasanminasi"

Pl. LXXV, fig. 5.　×1

Shell yellowish brown, with undulating longitudinal lines of chocolate, interrupted by triangular white spaces; which are irregulary disposed, but crowded at the shoulder, base and middle so as to form bands; spire similarly marked; aperture white. Length about 80 mm.

Conus arenatus *Hwass*

"Komon-imo"

Pl. LXXV, fig. 6.　×1

Shell stoutly turbinated, coronated on the spire; white sprinkled in a waved longitudinal manner with very small, close brown dots, sometimes forming indistinct bands; aperture usually light flesh colour. Length about 55 mm.

Conus literatus pardus (*Bolten*)

"Kurohumodoki"

Pl. LXXV, fig. 7.　×1

Shell white, marked with revolving series of large and small dark chocolate or nearly black, round, square or triangular spots; these spots are frequently elongated longitudinally, and sometimes partially coalesce so as to form interrupted longitudinal stripes. Length about 120 mm.

Conus fulmen *Reeve*

"Bekko-imogai"

Pl. LXXV, fig. 8.　×1

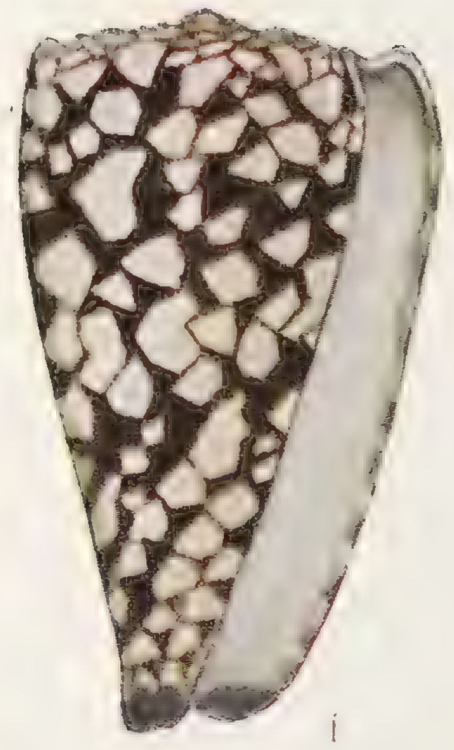
Shell somewhat elongately ovate, smooth, slightly grooved toward the base; pale rose-purple, white round the middle; longitudinally marked with two or three very prominent, broad, waved, purple-brown streaks; spire obtusely convex, variegated with purple brown, apex rose-tinted. Commonly inhabited throughout central and southern Japan.

Conus vexillum *Gmelin*

"Kabaminasi"

Pl. LXXV, fig. 9.　×1

Shell large and rather thin; spire striate, yellowish or chestnut colour, with an irregular white central band, sometimes obsolete, and occasionally another interrupted band at the shoulder; spire variegated with white and chestnut broad flanus, the latter often overlaying also the lighter chestnut of the body whorl. Distributed southern Japan.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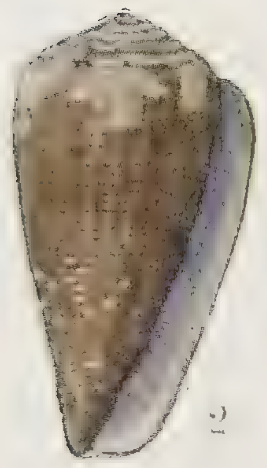
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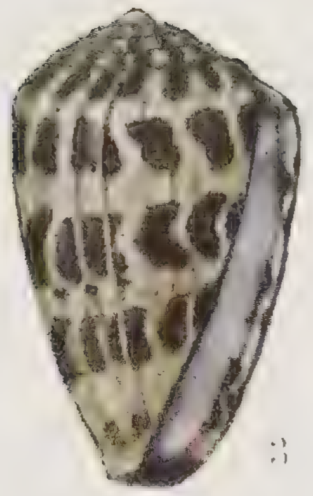
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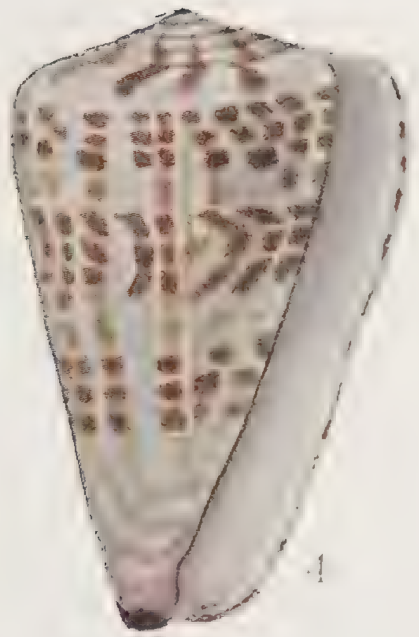
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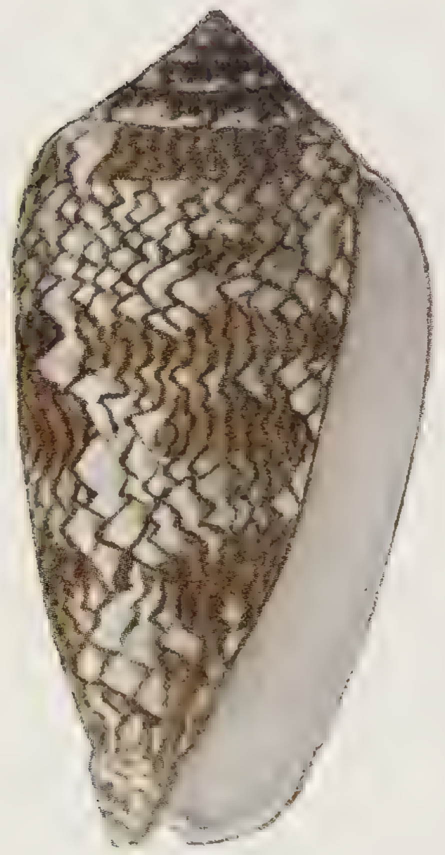
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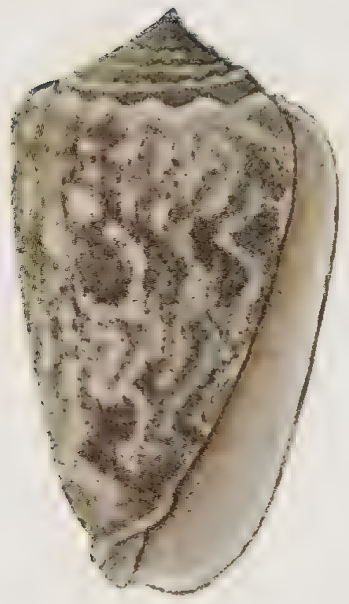
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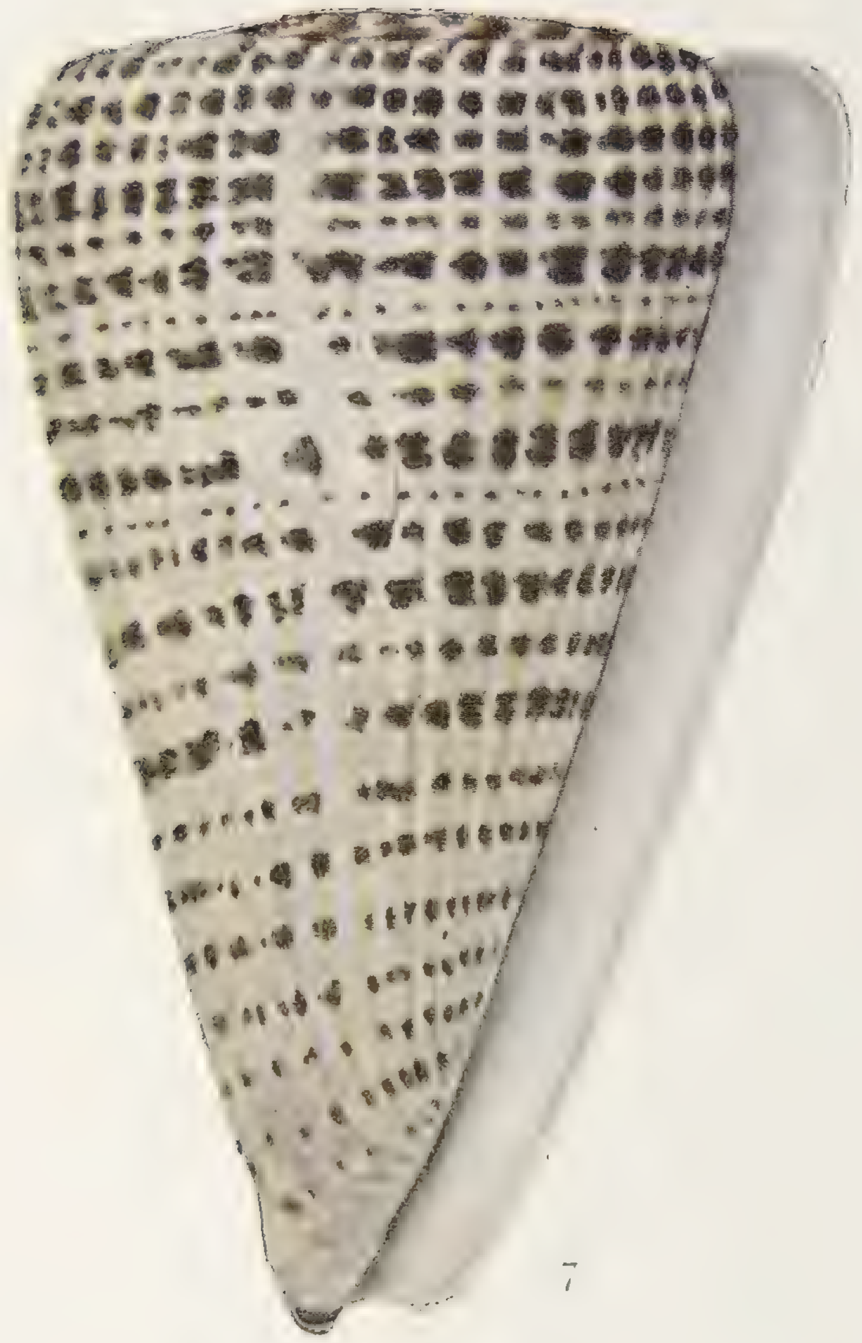
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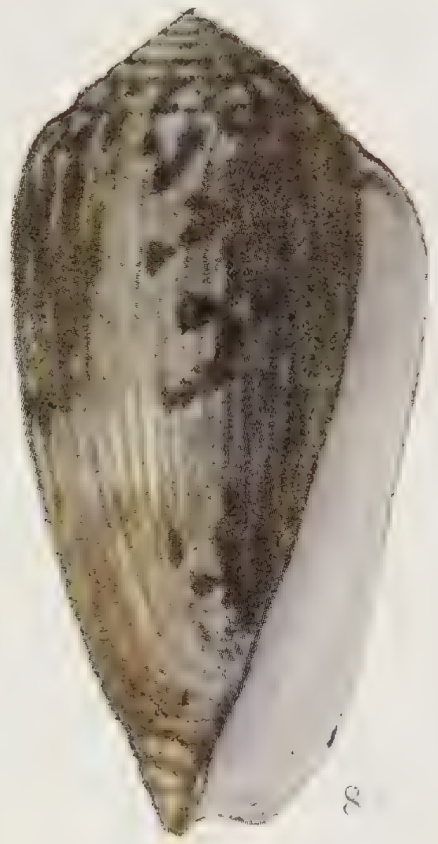
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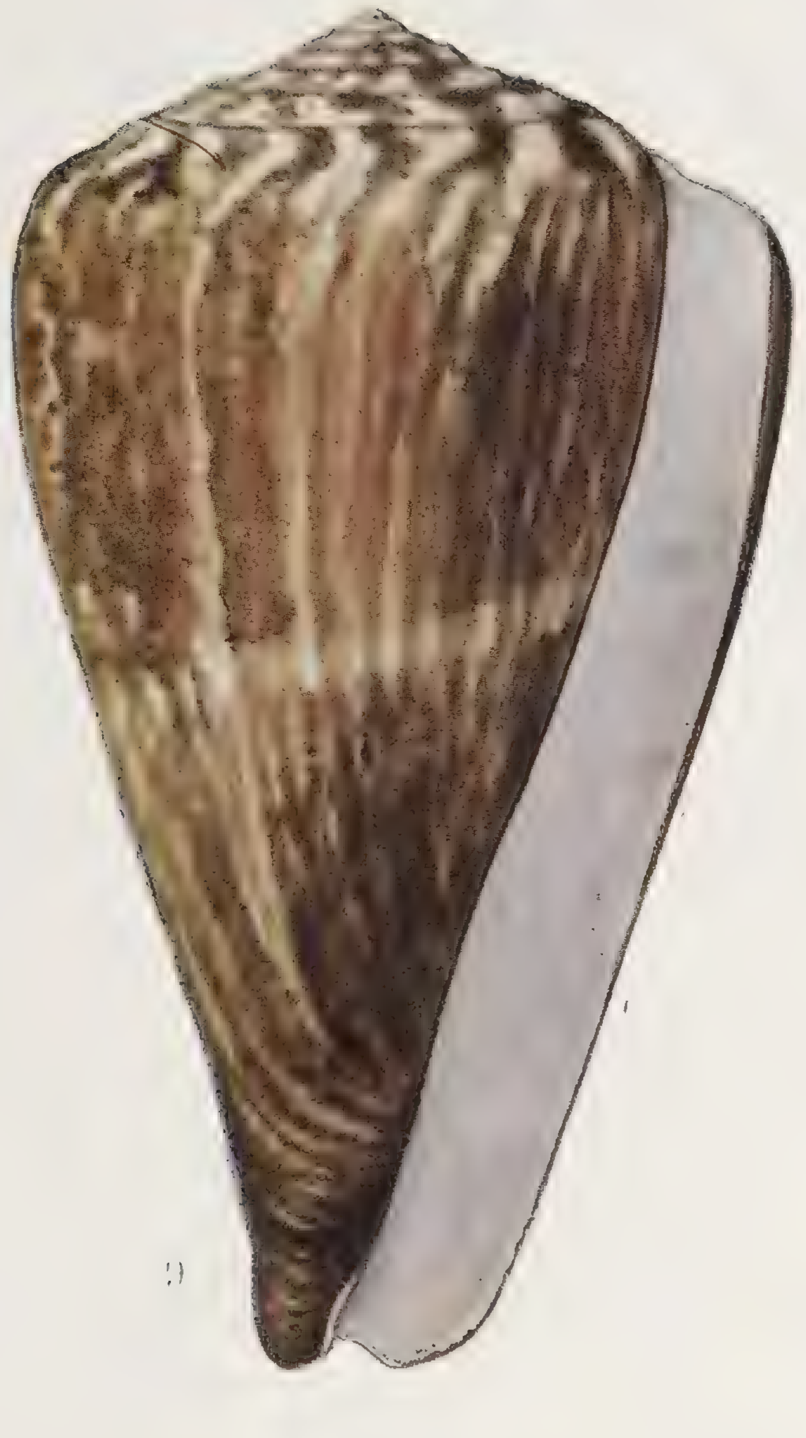
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クダマキガヒ

Turris leucotropis (*Adams & Reeve*)
（第七十六圖版　第一圖）　×1

貝殼は紡錘形にして，螺層高く全殼長の半分を占め，右旋にして約11階を數ふ．殼頂は尖り，各螺層の表面には高き肩角を有す．殼色は淡黃褐色，殼口は卵形を呈し，厴は長楕圓形にし暗褐色なり．水管溝長し．

殼高65粍位．本州，四國，九州に產す．

ホンカリガネ

Turris unedo (*Kiener*)
（第七十六圖版　第二圖）　×1

螺塔は圓錐形にし寧ろ高く，各螺層は稍斜行して8階を數ふ．螺層周緣の龍骨は太く多くの疣狀結節を具ふ．該龍骨の下部には太き螺脈あり又龍骨上部は窪をなし不顯著なる螺脈を有す．殼表は淡褐色の地に螺脈間に白線あり．殼口は大にして長く，內面は白色なり．水管溝は寧ろ短く多少彎曲す．外唇は弱き山形を呈す．

殼高70粍位．中部日本の海に產す．

ウシノツノガヒ

Terebra muscaria *Lamarck*
（第七十六圖版　第三圖）　×1

殼色黃白を呈し縫合部には赤褐色の斑點をなせる1列あり．其下に同樣の2列（體層は3列）の斑點を有す．

殼長85粍前後にして，南方暖海に棲息す．

キリガヒ

Terebra triseriata *Gray*
（第七十六圖版　第四圖）　×1

錐の如き細長なる卷貝なり．螺塔頗る高く，螺層其の數非常に多く往々にして50階以上に達するものあり．最初の4層は胎殼なり．縫合線上には1條の小顆條粒帶を繞らし，縫合下には連珠狀の稍大なる2顆粒帶を有し其の下に5列の大小交互せる小顆粒帶あり．之等の螺脈は多くの縱線によりて横切られ顆粒狀をなせるものにして，殼表は淡黃褐色を呈す．殼口は比較的廣く前溝は反曲す．

殼高80粍位．紀州，土佐等の暖海に產す．

ヤスリギリ

Terebra torquata *Adams & Reeve*
（第七十六圖版　第五圖）　×1

小型細長き卷貝にして，螺塔高く縫合線上は狹き縱肋と顯著なる螺脈と交互して美麗なる格子狀をなし，縫合下には1溝にて分たれたる2條の連珠狀帶を繞らす．殼の地色は帶白色にして之に黃褐色の縱斑を雜ふ．

殼長55粍位．西部日本の暖海に產す．

リウキウタケ

Terebra maculata (*Linné*)
（第七十六圖版　第六圖）　×1

筍形の大型卷貝にして，貝殼厚く，螺塔高し．螺層は多く15階を數へ各螺層は急に其の大さを增加するの觀あり．殼頂に近き數層の周緣には1條の細溝環狀をなし，其他に稍顯著なる縱襞を有す．一般に殼表には細絲樣の生長線を有し，光澤强く，縫合顯著，淡肉色の地に栗黑色の方斑を2列に配せしむ．殼口は比較的小さく前方は少しく彎入す．綳帶は顯著なり．

殼高220粍位．琉球，大島等の海に產す．

ベニタケ

Terebra dimidiata (*Linné*)
（第七十六圖版　第七圖）　×1

白色の地に赤橙色の斑點列をなせり．縫合帶は橙赤色なり．上層には縱襞を有すれど下層は滑かなり．南方暖海に棲息し，殼長100粍に達す．

キバタケ

Terebra crenulata (*Linné*)
（第七十六圖版　第八圖）　×1

稍細長き卷貝にして，螺塔は高く鋭し．螺層多く約17階を數へ，縫合直下に鈍き結節の一列を有す．結節の下には細き螺線をなす．殼頂に近き7，8層の表面には縱襞を有す．殼表は淡褐色にして結節間には不規則なる栗色線を有し其の下には2條（體層には3條）の栗色小點線を繞らす．殼口は卵形に近く，內面は淡褐色なり．前溝は稍一方に曲る．綳帶を有す．

殼高115粍位．琉球に產す．

タケノコガヒ

Terebra subulata (*Linné*)
（第七十六圖版　第九圖）　×1

殼は肉色或は黃色にして，稍方形の濃褐色點2列に並べり．上層には縱襞ありて縫合帶をなすも，下層に於ては消失せり．殼表滑かにして螺脈を有す．

殼長130粍に達し，南方暖海に棲息す．

Turris leucotropis (*Adams & Reeve*)

"Kudamaki-gai"
Pl. LXXVI, fig. 1.　×1

Shell sharply turrited, brownish; whorls strongly keeled, upper most keel largest, conspicuous; slit rather central; canal straight, equalling the length spire.

Drillia unedo (*Kiener*)

"Honkarigane"
Pl. LXXVI, fig. 2.　×1

Whorls about 13, angular convex, concave above, buff, finely mottled all over with reddish-brown, purplish on the spire, especially between the folds. Sculptured with oblique longitudinal folds which stop abruptly at the shoulder and gradually decrease below; spiral rather spaced, coarse and unequal, alternating in size, absent on the concave upper surface of the whorls. Aperture sub-rhombic, narrowed below. Anal sinus very deep, straight; outer lip arched forward.

Terebra muscaria *Lamarck*

"Usinotunogai"
Pl. LXXVI, fig. 3.　×1

Yellowish white, with a row of oblong bright chestnut spots on a sutural band, and two (on the body-whorl three) similar rows below it; the sports are smaller and more widely separated than in the preceding species, and the form of the shell is narrower.

Length about 90 mm.

Terebra triseriata *Gray*

"Kirigai"
Pl. LXXVI, fig. 4.　×1

Fulvous white or straw colour, narrow, whorls numerous, flatly concave, spirally ridged, sometimes decussated by longitudinal sculpture, with two bands of nodules below the suture, and a single smaller row on the periphery of the last whorl.

Terebra torquata *Adms & Reeve*

"Yasurigiri"
Pl. LXXVI, fig. 5.　×1

Longitudinal plicæ narrow, raised, interstices spirally striatelatticed; next the suture are two nodulous bands, separated by a sulcus, the periphery is subangulated and slightly nodulous on the angle, between this and the sutral band the surface is somewhat concave; fawn coloured, the sculpture lighter, a white band below the periphery.

Length 60 mm.

Terebra maculata (*Linné*)

"Ryukyutake"
Pl. LXXVI, fig. 6.　×1

Flesh white, broadly banded with fawn-colour, the bands often broken up into oblong, close markings, with a band of longitudinal black purple striations next the sutures, and below it a second much smaller band of spots or hieroglyphic markings, early whorls often longitudinally plicate.

Terebra dimidiata (*Linné*)

"Benitake"
Pl. LXXVI, fig. 7.　×1

Reddish orange, banded with oblong spots on a white ground, sutural band orange-red; upper whorls longitudinally plicate, lower ones smooth.

Terebra crenulata (*Linné*)

"Kibatake"
Pl. LXXVI, fig. 8.　×1

Whorls obtusely noduled below the sutures; carneous cream-colour streaks with chestnut irregular lines between the nodules, and with three revolving rows of small chestnut spots below, two of which appear on the spire whorls.

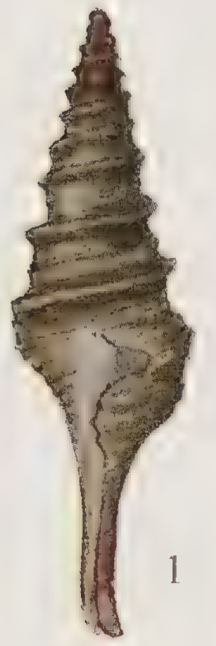
Terebra subulata (*Linné*)

"Takenoko-gai"
Pl. LXXVI, fig. 9.　×1

Light flesh colour or yellowish, with two spiral series, of quadrangular distant chestnut or chocolate spots; upper whorls longitudinally plicate, and with a sutral band; in the later whorls this band is lost, but sometimes the whorls are somewhat swollen just beneath the sutures, although the impressed line defining the band is obsolate; surface smooth, or with impressed revolving lines.

第七十六圖版

PL. LXXVI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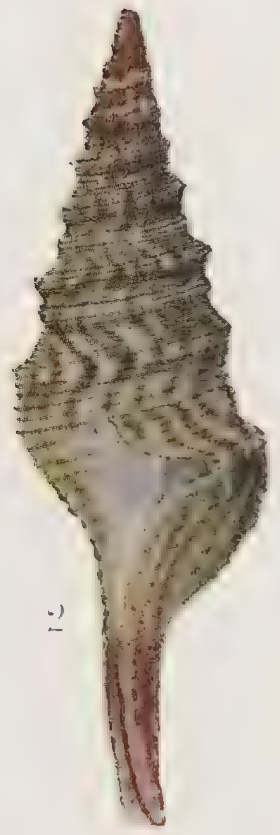
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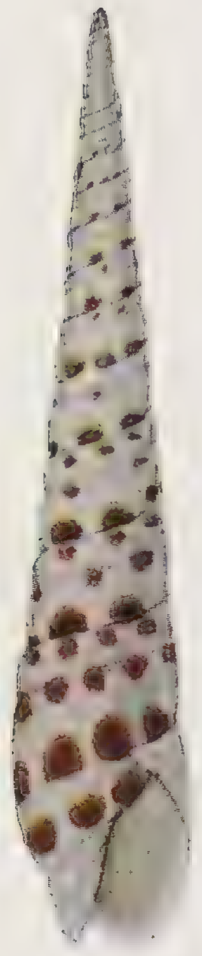
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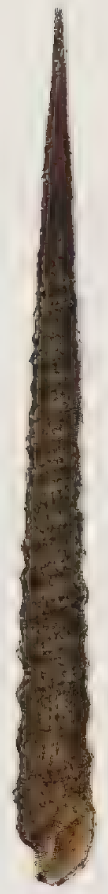
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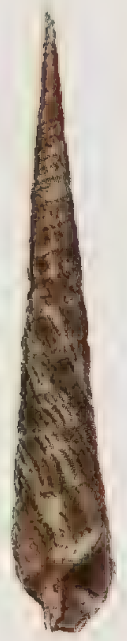
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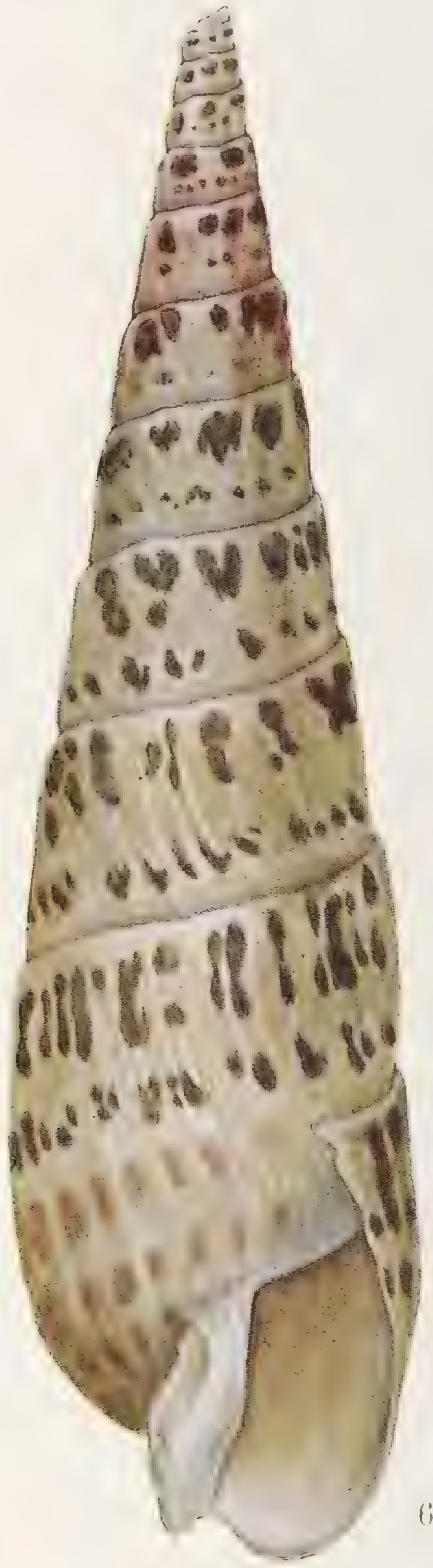
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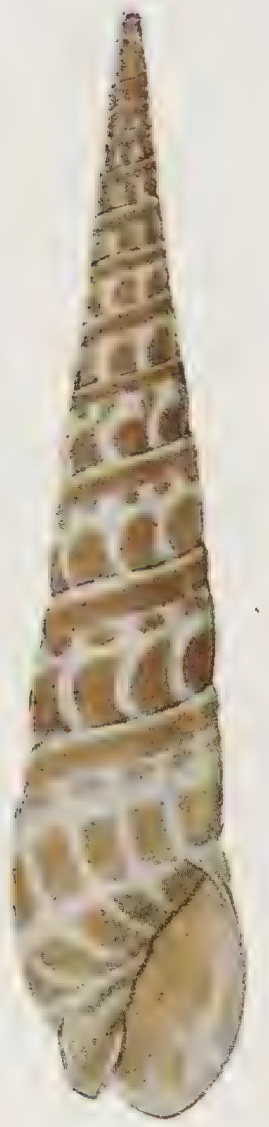
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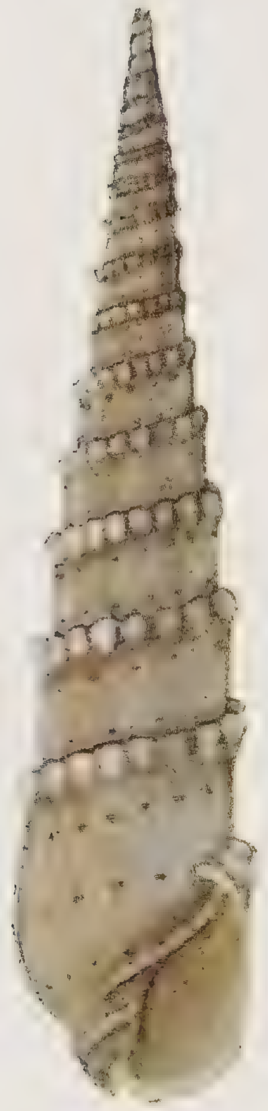
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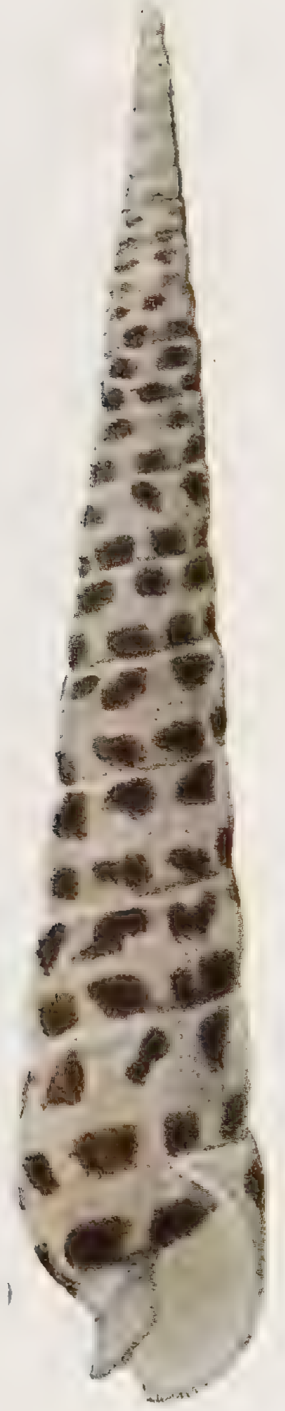
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キクノハナガヒ
Siphonaria sirius *Pilsbry*
（第七十七圖版　第一, 二, 三圖）　×1

貝殼は多角長楕圓形にして, 殼頂は殼の略中央にあり. 之より大小多くの放射肋を出す. 放射肋中太きもの 6–7 條あり, 其間に約 3–7 條の小放射肋を雜ふ. 殼表は灰白色にして其周緣は黑褐色なり. 殼の內面中央には大なる楕圓形の藍色窩心部ありて其周緣に黑褐色の環あり. 殼表に於ける大放射肋は內面に於ては白き溝となる.

直徑 15–25 粍, 高 3 粍位. 房州より九州に迄分布し, 干潮時露出する岩礁上に着生す.

カラマツガヒ
Siphonaria japonica (*Donovan*)
（第七十七圖版　第四, 五, 六圖）　×1

楕圓形低平なる貝殼にして, 殼表には大小多くの放射肋を有す. 黃褐色の殼皮を被る. 殼の內面は大部分褐色にして周緣のみ白色なり. 殼頂は略中央なれど稍後寄りに位す.

直徑 12–17 粍, 高 7 粍位に達す. 分布頗る廣くして北は北海道より九州に及ぶ.

ミスガヒ
Hydatina physis (*Linné*)
（第七十七圖版　第七, 八圖）　×1

貝殼は卵形にして薄く, 體層は大にして淡黃色之に多くの黑色帶を繞らし, 簾の如き外觀を呈す. 螺塔は退化し體層上部の面と同一平面にありて螺層は約 2 階半. 殼口は大きく長卵形にして前方特に擴る. 縫合は深き溝をなす. 內脣には滑層あり.

殼高 40 粍, 直徑 25 粍位. 房州より西南方琉球小笠原島に及ぶ暖海地方の沿岸に產し, 外套膜, 足等は甚だ美麗なり.

ヤカタガヒ
Hydatina albocincta (*Hoeven*)
（第七十七圖版　第九, 十圖）　×1

球形に近き貝殼にして, 體層は大きく脹れ半透明なり. 螺塔は退化し該部は微凹穴に變ず. 灰褐色の地に斜に數帶の濃色帶を繞らし, 褐色の縱線多し. 殼口は大きく長卵形にして前方特に太し.

殼高 50 粍位に達す. 房州以南の暖海に產す.

マルツノガヒ
Dentalium vernedei *Sowerby*
（第七十七圖版　第十一圖）　×1

貝殼は牙狀にして空管, 殼質厚く幽かに弓曲す. 長さ 124 粍に達し殼口は正圓にして直徑 12 粍卽ち長さの約 $^{1}/_{10}$ に相當す. 殼表には白地に淡黃色の太き環狀帶ありて光澤稍強く, 約 40 條の丸味がかれる縱隆起條あり. 肛門も正圓にして小さく直徑 2 粍位. 肛口に近く殼の腹側に約 12 粍に達する裂孔を有す.

肥前, 紀伊等の比較的暖かき海の深さ 16 米內外の海底の砂中に斜に埋れて棲息す.

ヒラツノガヒ
Dantalium hungerfordi *Pilsbry & Sharp*
（第七十七圖版　第十二圖）　×1

貝殼は稍重厚にして灣曲せず. 殼の下方は比較的太く, 上方に從ひ次第に細し. 縱脈を刻す. 殼口は楕圓形にして頂口は腹方に稍長き缺刻あり. 黃褐色を呈し, 殼長 50 粍餘あり. 本州沿岸 10–25 尋位砂泥底に棲息す.

ツノガヒ
Dentalium weinkauffi *Dunker*
（第七十七圖版　第十三圖）　×1

稍小形の角貝にして, 長 85 粍, 殼口の直徑 7 粍位に達す. 貝殼は肛口に近き約三分の一の所より特に弓曲す. 殼表には殼口に近づくに從ひ漸次弱くなる大小約16條の縱肋を有し該縱肋は殼口より三分の一位にて消失す. 殼色は肉色なるも殼口に近づくに從ひて淡く遂に白色となり光澤稍強し. 殼の內面は黃色を呈す.

房州より九州に及ぶ沿岸の深さ 4–5 米の砂泥中に產す.

オキナエビス
Pleurotomaria beyrichi *Hilgendorf*
（第七十七圖版　第十四圖）　×1

圓錐形の卷貝にして, 螺塔は高く螺層は膨る. 淡柑色に鮮紅色の斜縱斑に彩られ頗る美麗なり. 200–500 米の深海に產し, 採集困難なると, 美麗なると, 稀有なる事とに依り價甚だ高し. 相模, 紀伊, 土佐の深海に產す.

ナツメガヒ
Bullaria vernicosa (*Gould*)
（第七十七圖版　第十五, 十六圖）　×1

貝殼の形態棗の實に酷似し, 體層は卵形にして大なるも螺塔無く該部は小凹穴に變ぜり. 殼表には多くの絹絲樣の生長線を有し, 葡萄色の地に淡色の雲斑と黑點兩帶を雜る. 殼口は上部狹く下部廣く長形にして內面は白色なり.

殼高 43 粍位. 房州, 琉球の海に至る間廣く分布し, 四, 五月頃海岸に產卵す.

ミサキグルマ
Architectonica maxima (*Philippi*)
マキミゾグルマ
（第七十七圖版　第十七, 十八圖）　×1

螺塔低平なる螺貝にして, 螺層は 9–10 階を數へ, 體層にはその周緣に銳き角あり. 肩角部は稍太き隆起線をなす. 其上部に之より幅廣き 1 帶を繞らし, 更に其上部に太き 1 帶を有す. 該帶は縫合に近く小溝により更に 1 小帶を形成す. 次層以上のものは中央の太き 1 帶と上下の細き 2 帶よりなる. 殼表は紫灰色, 縫合及び周緣附近に褐色帶或は美麗なる色彩斑紋を繞らす. 殼口は角張り, 臍孔は廣く深し. 殼高 25 粍, 直徑 50 粍位. 房州, 相州, 紀伊, 大隅及び薩摩等の暖海に產す.

Siphonaria sirius *Pilsbry*
"Kikunohana-gai"
Pl. LXXVII, figs. 1, 2, 3.　×1

Shell oblong, polygonal, low conical with subcentral, erect apex; primary ribs all single, generally 7, strongly elevated and white; interspaces wide, dark brown, radially finely ribbed. Interior brown-black, the larger ribs indicated by white rays; siphon occupying a single rib, never a double one. Cavity with a white callus (rarely chestnut coloured) the region of the muscle impression bordered with chestnut stains.

Length 25 mm. breadth 20 mm.

Commonly occurs throughout central and southern Japan.

Siphonaria japonica (*Donovan*)
"Karamatu-gai"
Pl. LXXVII, figs. 4, 5, 6.　×1

Shell ovate, flatly convex, rather irregular, profusely radiately wrinkle-ridged, lateral sinus broad, spoon-shaped; whitish, stained within with orange-brown.

Shell attains to a length of 17 mm. diametre, 7 mm. in height; commonly distributed from Hokkaido to Kyusyu. Attached abundantly on tidal rocky shores.

Hydatina physis (*Linné*)
"Misugai"
Pl. LXXVII, figs. 7, 8.　×1

Shell ovate-rounded, thin, semipellucid, smooth, whitish, painted with unequal transverse blackish lines, spire concave; aperture large, dilated in front; it varies with undulating, concentric, reddish lines.

Shell attains to a length of 40 mm. in height, 25 mm. in diameter. Inhabits warmer current shore on Pacific coast of Japan.

Hydatina albocincta (*Hoeven*)
"Yakata-gai"
Pl. LXXVII, figs. 9, 10.　×1

Shell subglobose, inflated, thin, semipellucid, brownish ash-coloured, rayed with three broad bands, and painted with oblique, brown numerous, longitudinal striæ, spire retuse, concave; aperture very wide in front.

Attains to a length of 50 mm. inhabiting sandy bottoms of shallow water.

Dentalium vernedei *Sowerby*
"Marutunogai"
Pl. LXXVII, fig. 11.　×1

Shell large, pale fulvous, banded with a reddish-brown, finely striated, rather straight, slowly increasing; apical fissure rather long.

Shell attains to a length of 124 mm. long, 12 mm. in diameter. Inhabits sandy bottoms of shallow water in warmer parts of Japan.

Dentalium hungerfordi *Pilsbry & Sharp*
"Hiratuno-gai"
Pl. LXXVII, fig. 12.　×1

Shell solid, broad, rather straight, gradually increased, fluted with many longitudinal ribs; section of the shell toward margin is elliptical; apex incised with a rather long fissure on the ventral side; colour yellowish brown.

Length of the shell 50 mm; inhabits muddy bottoms about 10–50 metres depth; outer coast of Main Island of Japan.

Dentalium weinkauffi *Dunker*
"Tuno-gai"
Pl. LXXVII, fig. 13.　×1

This species is recognized by its well curved shell, ribbed in the apical portion, but smooth in its apertural portion, the ribs gradually vanishing towards the latter. The number of ribs varies according to the individuals, but are generally between twelve and sixteen near the apical end, gradually increassing, however, toward the aperture.

Inhabits central and southern Japan, in shallow sandy bottoms. Attains to a length of 85 mm.

Pleurotomaria beyrichi *Hilgendorf*
"Okina-ebisu"
Pl. LXXVII, fig. 14.　×1

Shell top-shaped, decorated with yellow and red in fine streaks on its top-shaped-spire, and the sinus band ends in a deep slit at the upper (sutural) edge of the lip

Rarely inhabiting deep sea bottom of 200-500 metres in depth, on Pacific coast of middle and southern Japan.

Bullaria vernicosa (*Gould*)
"Natume-gai"
Pl. LXXVII, figs. 15, 16.　×1

Shell solid, ovate subcylindrical, posteriorly rather narrow, with end truncated, anteriorly slightly swollen, with round end, and three spiral grey bands, variegated with red dots and spots, white within, aperture narrowed posteriorly, wide in front, inner lip thick, arched.

Attains to a length of 40 mm. in height 25 mm. diameter.

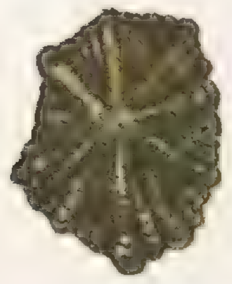
Architectonica maxima (*Philippi*)
"Misaki-guruma"
"Makimizo-guruma"
Pl. LXXVII, figs. 17, 18.　×1

Shell flatly conical. Whorls nine to ten, slightly convex to nearly flat, spirally banded both above and below the suture. The infrasutural band or cord is single, followed by a sulcus, while the suprasutural one is double, having a groove in the middle. Incremental lines very conspicuous, regular, looking like striæ and causing the band to appear crenulate.

Periphery angular, formed by the lower half of the double band. Base somewhat convex with the peripheral portion flattened and with two spiral grooves. Aperture trapezoidal.

Shell purplish brown in colour, and beautiful brownish band in suture and periphery.

Diameter of shell about 50 mm; height 25 mm. in length. Distribution, central and southern Japan.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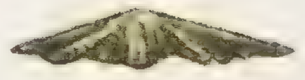
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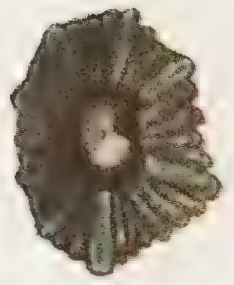
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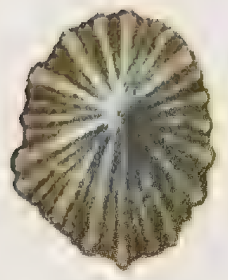
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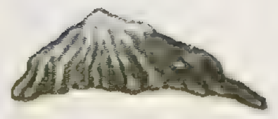
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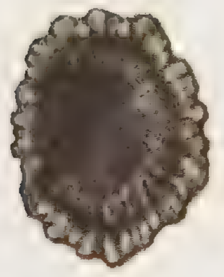
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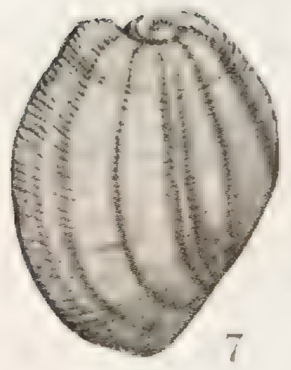
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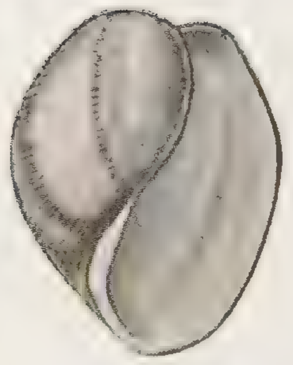
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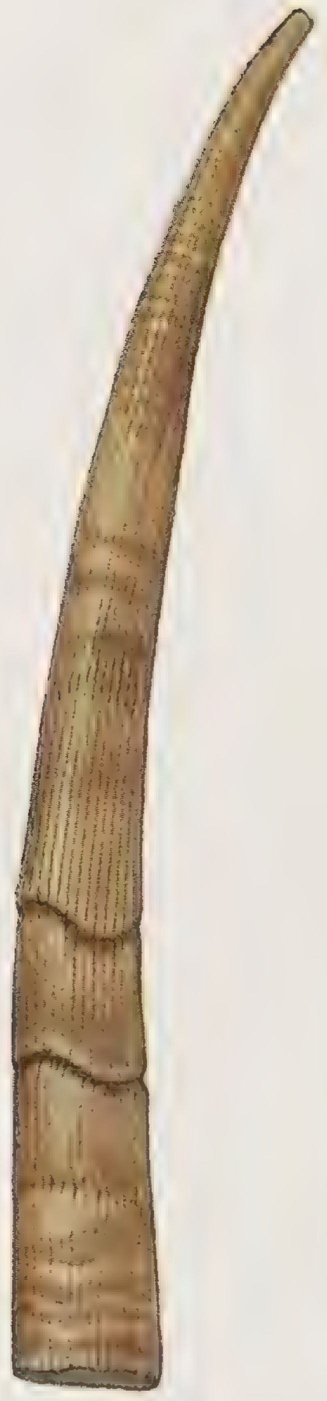
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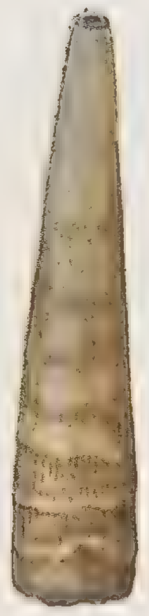
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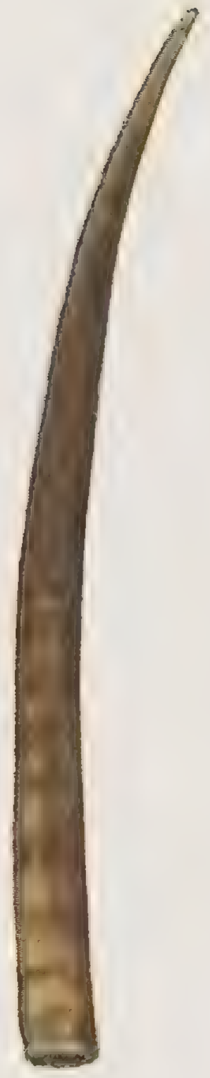
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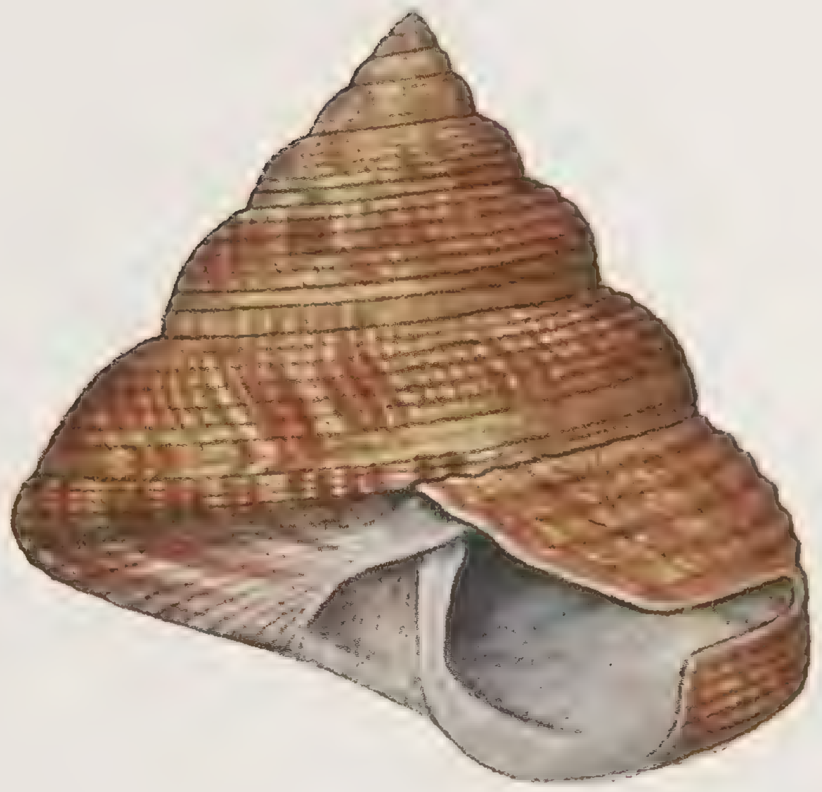
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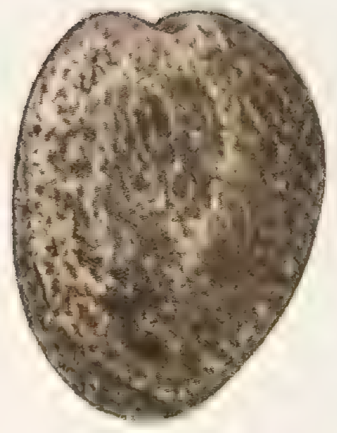
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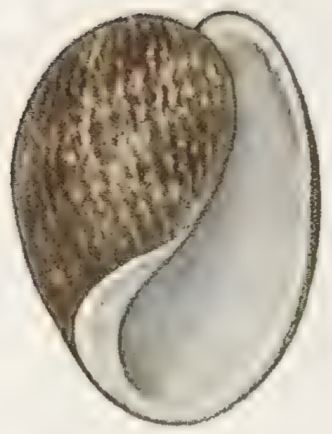
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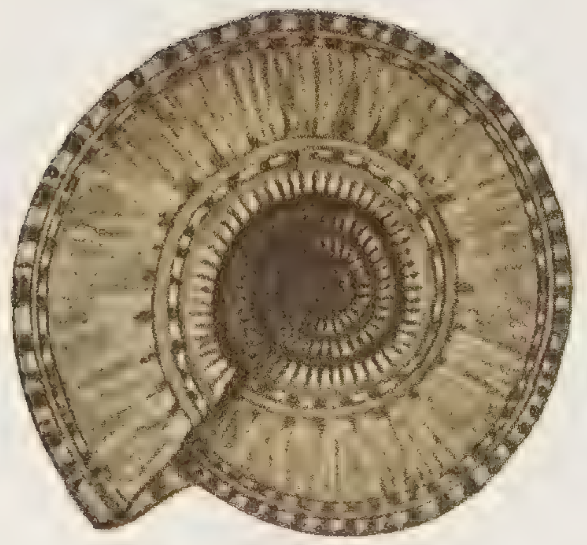
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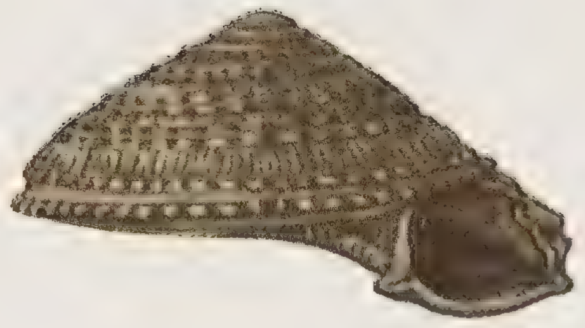
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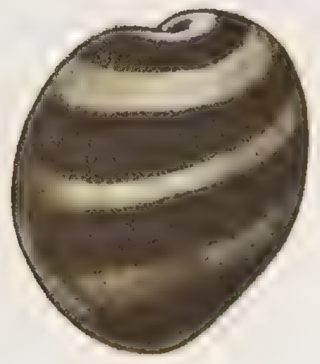
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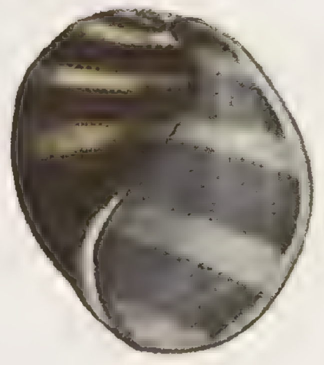
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エガヒ

Barbatia decussata (*Sowerby*)

（第七十八圖版　第一, 二圖）　×1

稍横に長き卵圓形を呈し, 中央部に於て僅に凹める部分あり. 殼頂より多數の放射肋を出し, 又細かに成長線を刻めり. 殼面は褐色の外皮を被むり, 內面は白色なり.

殼長 50 粍に達する二枚貝にして廣く分布し, 淺海岸礁の間に貝絲を出し附着棲息す.

アラナミマガシワ

Anomia cytaeum *Gray*

（第七十八圖版　第三, 四, 五, 六圖）　×1

圓形, 且扁平なる二枚貝にして, 殼質頗る薄脆, 片殼は圓形に膨れ不顯著なる殼頂は背緣の中央部殼端より稍內に在り. 殼頂を中心とし多くの微細なる輪脈と皺狀の放射脈とを微に刻し淡黃色或は帶褐にして稍光澤有り. 他殼は極めて薄く僅に內曲し, 殼頂附近に卵形の空隙あり. 上殼に比し稍淡色にして放射脈を見ず. 殼の內面には 1 個の肉柱痕と 2 個の貝絲痕とを有す.

殼長 43 粍位, 殆んど全國的に分布し, 下殼片の卵形空隙より石灰化せる貝絲を出し, 淺き海岸の岩礁, 礫,「アカニシ」「カキ」等の大型貝殼に着生す.

ワシノハ

Navicula navicularis linter (*Jonas*)

（第七十八圖版　第七, 八, 九圖）　×1

不等邊長方形の二枚貝にして, 殼面の凹凸甚だしく放射肋は約 30 條內外を數へ, 放射肋に結節なし. 灰白色の地に多くの紫褐色橫帶を有す. 前後兩丘を合して長き稜形をなし, 兩殼頂は相離る. 蝶番線は一直線をなし多くの鋸齒を有す.

殼長 65 粍位. 房州より九州に至る海に產す.

アカガヒ

Arca inflata *Reeve*

（第七十八圖版　第十圖）　×1

心臟形の二枚貝にして兩殼共膨大し, 殼頂は特に丸く膨出す. 殼頂より放射狀に走る隆起放射脈は 41—43 條, 直線をなせる蝶番線上に細かき櫛齒狀の齒を並列し中央より兩端に至るに從ひ大となる. 介殼の外面腹緣には濃褐色の表皮を被り, 內面は乳白色なり. 腹緣には襞あり.

殼長 100 粍位. 6-9 月に產卵す. 靜かなる內灣の深さ 15-40 米位の泥底に棲息し, 東京灣, 伊勢灣, 瀨戶內海, 有明灣, 不知火灣等主產地なり. 肉質柔軟且味頗る佳良なり.

モガヒ

Arca subcrenata *Lischke*

（第七十八圖版　第十一, 十二圖）　×1

殼形は「アカガヒ」に酷似せるも小形なり. 放射狀に走る隆起條は 30-38 內外, 殼表には淡褐色の有毛殼皮を被る.

殼長 53 粍位. 七, 八月の候產卵す. 稚介は細小なるとき茸毛を伸ばし「アヂモ」,「ニラモ」などの海藻に附着し後稍成長するに及び海藻より離れて泥の上層に成育す. 出雲の中海, 備前の兒島灣及び東京灣（千葉縣側）にては, 稚介を蒔き付け養殖業を營む. 殊に兒島灣へは年々中海より多數の稚介を運搬して放養す.「ハイガヒ」よりも成長速かにして肉は食用に供せらるゝも需要は內地のみにして支那への輸出には適せず.

ハイガヒ

Arca granosa *Linné*

（第七十八圖版　第十三, 十四圖）　×1

形狀大さ共に「モガヒ」に似たるも, 放射狀に走る隆起條の數少く, 僅に 20 條內外にして, 肋上には所々に著しき瘤狀突起を有す. 又貝殼の腹緣にある淡褐色の有毛殼皮なく, 容易に前者と區別する事を得. 四時平穩なる暖海の泥深き淺所に棲息す.「モガヒ」は干潮時に露出する所には棲息せざるも,「ハイガヒ」は露出する如き泥底を寧ろ好適とす. 產卵期は八, 九月の候にして稚介は始め細砂底の澱みの如き場所に成育し「モガヒ」の如く「アヂモ」に附着せず. 適當なる養殖地は備前兒島灣及び九州有明灣なり. 殊に兒島灣にては廣大なる面積を利用して養殖を營み生貝のまゝ年々支那に輸出す.

Barbatia decussata (*Sowerby*)

"Egai"

Pl. LXXVIII, figs. 1, 2.　×1

It is transversely oval, very inequilateral, dorsally somewhat excavated in the middle, with numerous unequal, radiating riblets crossed by concentric lines, some of which are rather coarse. There is no sharp diagonal keel on the surface. The area is rather narrow, with grooves parallel to the hinge-line. The shell is rather worn and thin, but it seems to have been originally firm.

Length about 50 mm.

Anomia cytaeum *Gray*

"Ara-namimagasiwa"

Pl. LXXVIII, figs. 3, 4, 5, 6.　×1

Shell nearly orbicular in shape, strongly compressed. Surface of upper shell is very uneven especially in the upper valve on which we see irregular wrinkles and tubercles in some places; yellowish or brownish in colour. Inner shell with an oval foramen, which produces a calcareous byssus, and is attached to other big shells or rocks.

Shell measures about 40 mm. in length, 37 mm. in height. Very common in Japan.

Navicula navicularis linter (*Jonas*)

"Wasi-noha"

Pl. LXXVIII, figs. 7, 8, 9.　×1

Shell squarely elongated, slightly contracted in the middle, rather solid, anterior side rounded, posterior compressly angulated, truncated, ventral margin but little gaping; yellowish white, sparingly ornamented with a very few faint, broad, reddish brown streaks; radiately ribbed, ribs prominent, irregular, rather obsoletely tubercled; umbones remote; area of the ligament flat, the diamond shaped space enclosing the ligamentary grooves coated with a dark brown horny cuticle.

Arca inflata *Reeve*

"Aka-gai"

Pl. LXXVIII, fig. 10.　×1

Shell obliquely ovate, thin, inflated, nearly equivalve, sides slightly angulated at the upper part, rounded beneath; white, covered with a brown horny epidermis, scaly in the interstices between the ribs; rddiately ribbed, ribs numerous, forty in number, flat, smooth; ligamentary area rather narrow, bent inwards; umbones swollen, a little approximated.

Arca subcrenata *Lischke.*

"Mogai" "Sarubô"

Pl. LXXVIII, figs. 11, 12.　×1

This species is distinguished from the preceding species by a less number of radiating ribs, i.e. 30-38, and their subcrenate nature which in the left valve is seen on all the ribs anterior to the posterior carina, and on the right only on those near the anterior end of the shell.

Surface has a dark brownish epidermis.

Distribution, central and southern Japan, living in muddy bottoms.

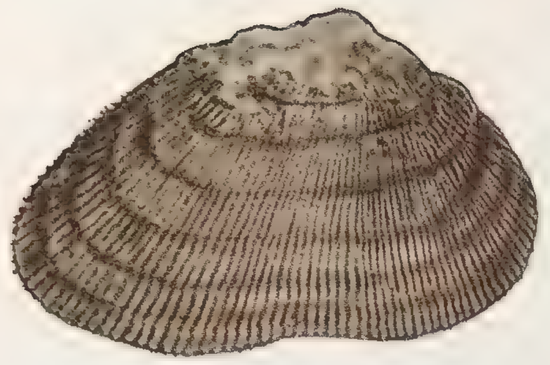
Arca granosa *Linné*

"Haigai"

Pl. LXXVIII, figs. 13, 14.　×1

This species is easily recognized by its thick, solid, swollen, somewhat oblique shell ornamented with coarse granular radiating ribs in number about 20. Shells measuring 45 mm. long, 36 mm. in height, 30 mm. in depth.

Inhabits muddy bottoms of shallow water in southern Japan.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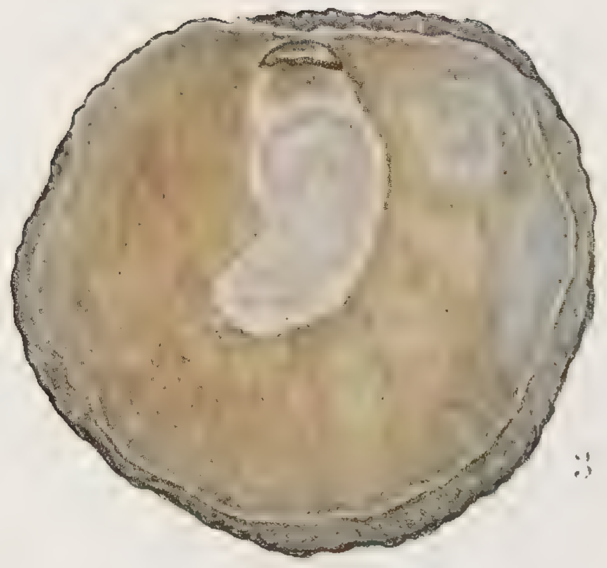
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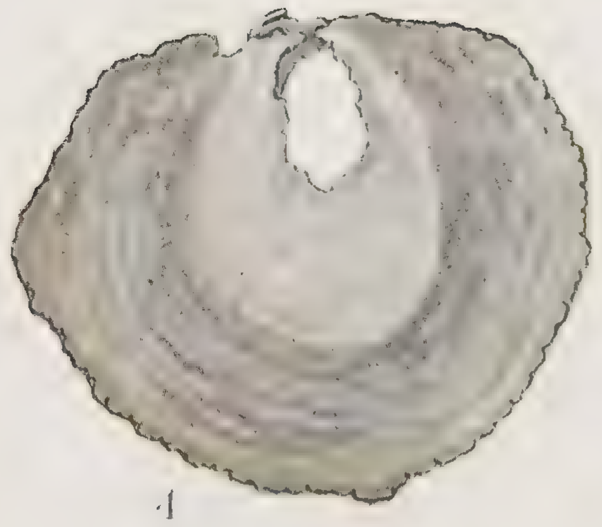
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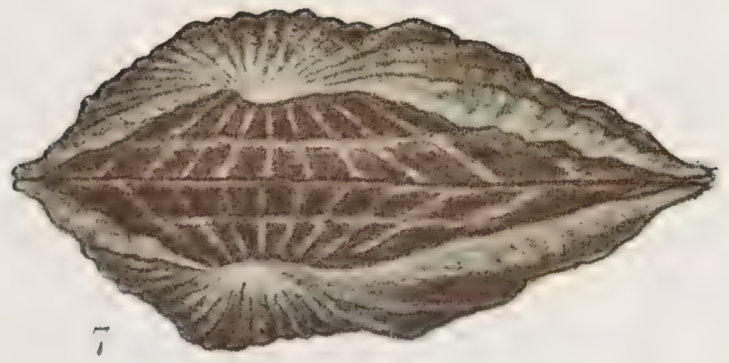
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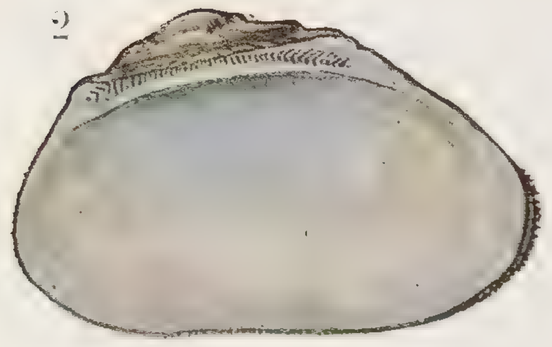

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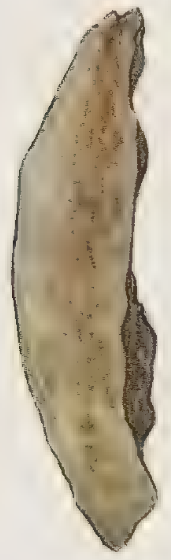

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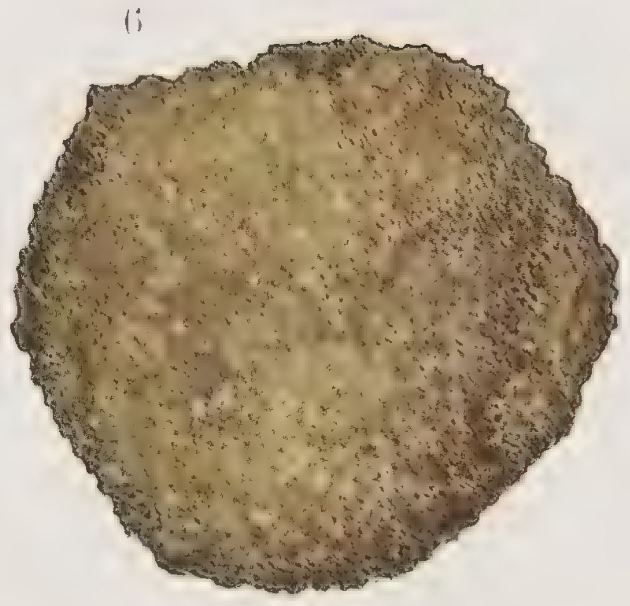

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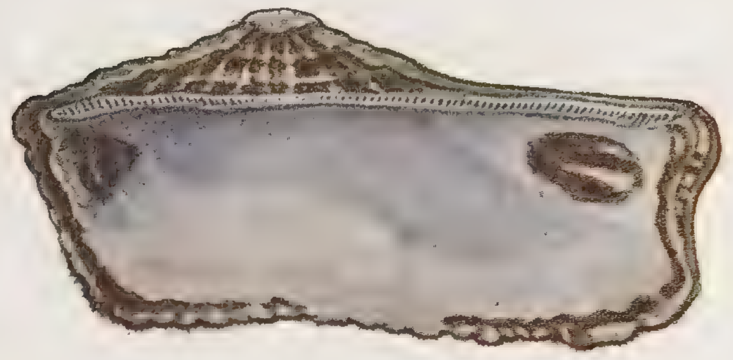

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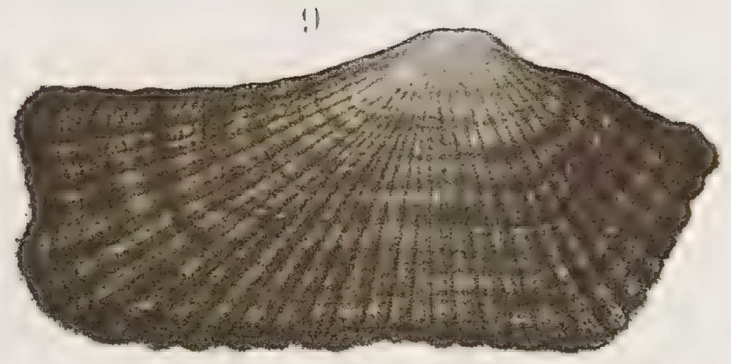

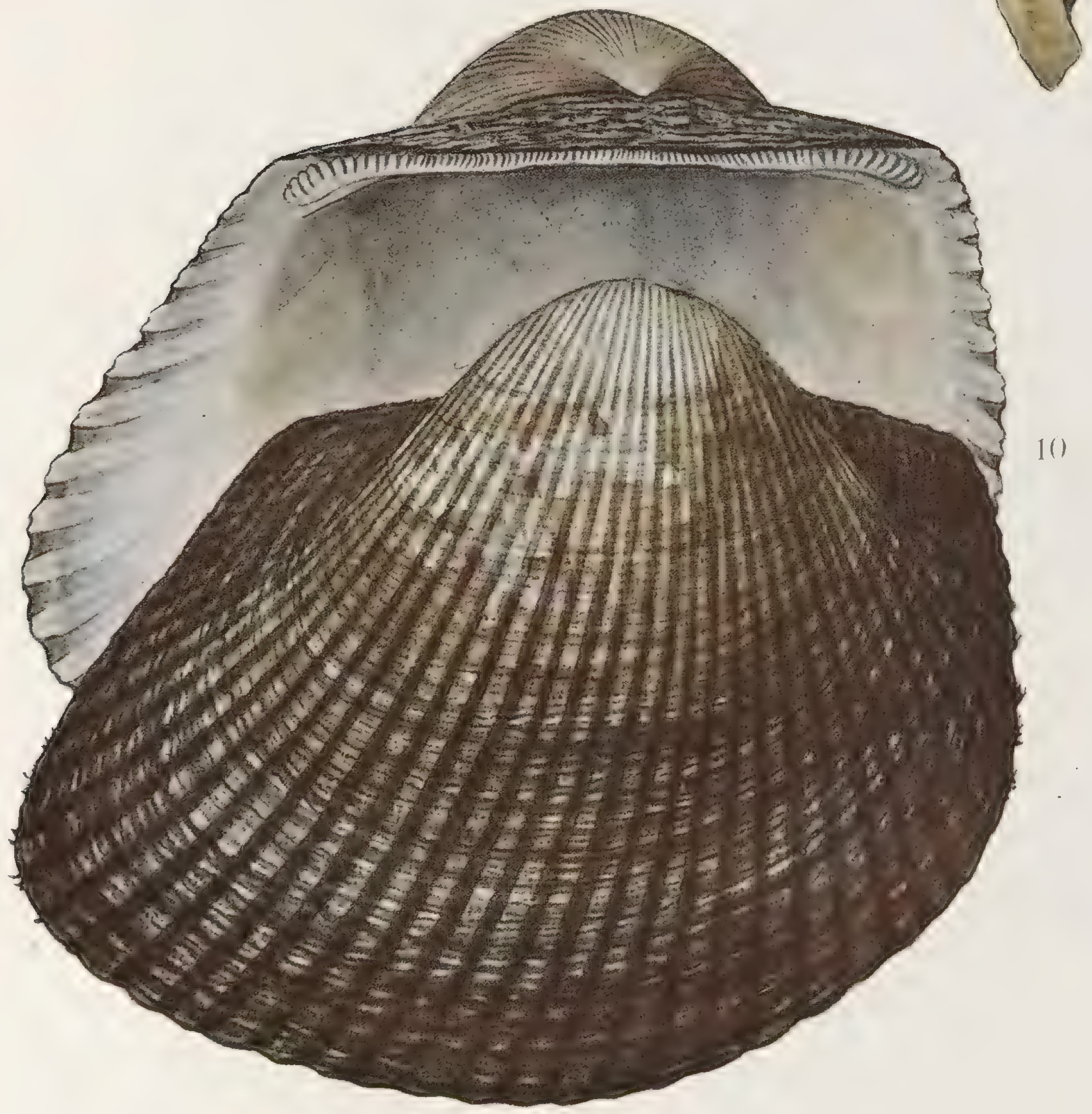
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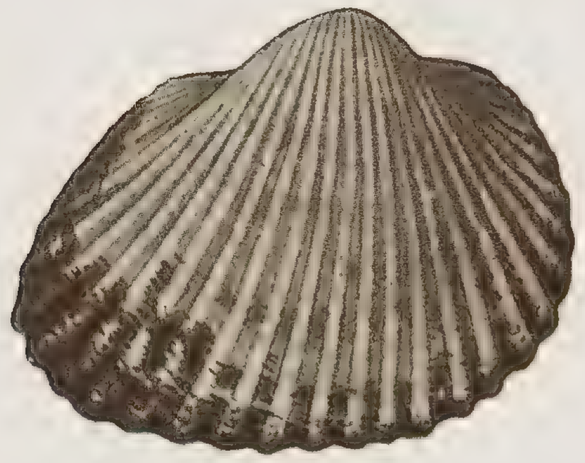
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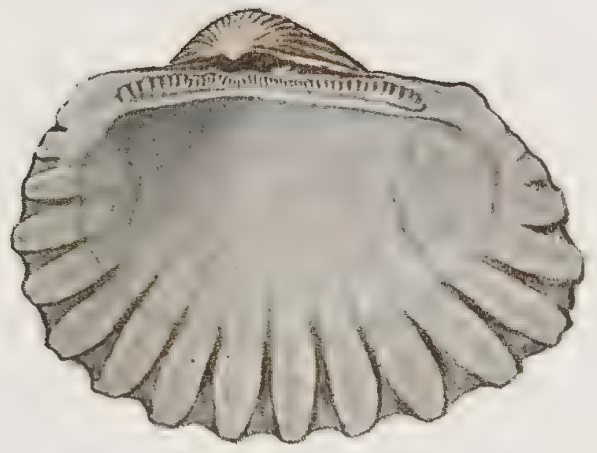
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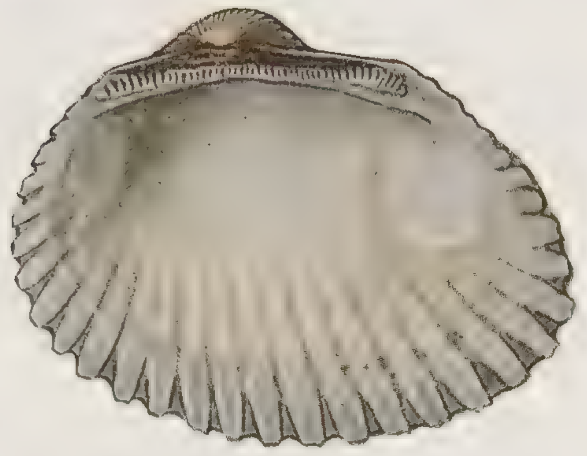

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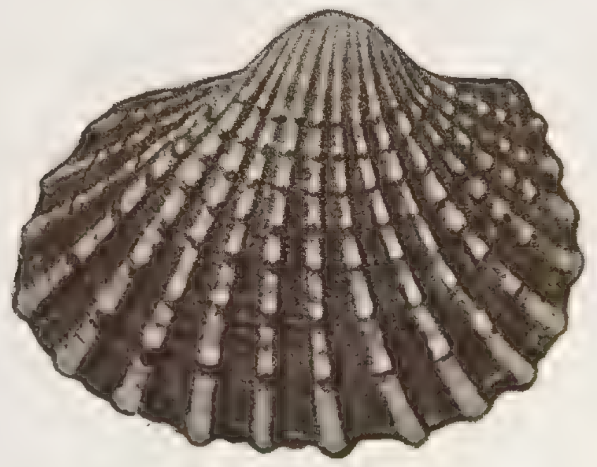


ツバメガヒ

Pteria cypsellus (*Dunker*)

（第七十九圖版　第一，二圖）　×1

貝殼は稍脹らみて三角形に長く延び，後端部は鋭き翼狀をなして滑かなり．殼表には僅かに纖維質の殼皮を被り，殼地は蒼黑色なり．殼の內面は白く眞珠光澤を呈す．

殼長 80 粍位．本邦暖海の海藻或は岩礁に貝絲を出し附着生活をなす．

ウグヒスガヒ

Pteria brevialata (*Dunker*)

（第七十九圖版　第三，四圖）　×1

貝殼は脹れて稍卵形を呈し長く延ぶ．後端部は翼狀に突出し，殼表には纖維質の殼皮を被り殼地は黃褐色を呈す．

殼長 70 粍位．本邦中部及南部に亘りて分布す．

イシマテ

Lithophaga curta (*Lischke*)

イシワリ

（第七十九圖版　第五，六，七圖）　×1

貝殼は圓筒狀に細長く，兩端は丸く，左右兩殼は等片なり．殼表には角質の殼皮を被り褐色を呈す．殼頂は僅に突起し蝶番線には齒なく直線をなし，靱帶は主こして內緣にあり．幼時は貝絲にて岩礁に附着するも，成長すれば岩礁に同形の穴を穿ちて棲息す．

殼長 50 粍，殼高 17 粍位．

タマキガヒ

Glycimeris vestita (*Dunker*)

モンズリガヒ

（第七十九圖版　第八，九圖）　×1

貝殼は厚く殆んご圓形を呈す．殼頂部は突出せるも殼高は殼長より稍短し．表面は紫褐色にして白き放射條を彩る．

殼長 65 粍，殼高 60 粍位．本州沿岸の砂地に棲息す．

ヒバリガヒ

Volsella barbata (*Linné*)

（第七十九圖版　第十，十一，十二圖）　×1

貝殼は卵形の三角形を呈し，前端部は細まりて突出し鈍角をなす．腹緣は稍凹入す．殼表には小さき生長線を有するも放射肋なく殼地は赤褐色を呈し粗き殼皮を被る．

殼高 50 粍，殼長 25 粍位．分布甚だ廣く，本邦各地淺海に貝絲を出して附着生活をなす．

ケガヒ

Trichomya hirsuta (*Lamarck*)

（第七十九圖版　第十三，十四，十五圖）　×1

前者より尙細長く，殼頂は前方に傾けり．殼幅は殼頂近くに於て幅廣く，腹面は稍凹みを呈し，其左右兩殼の中央は間隙を有せり．黑褐色の殼皮を有し，棕櫚毛狀を呈せる多數の長毛は全面を覆へり．蝶番には鋸齒を有す．

本邦沿岸廣く分布し淺海の岩礁に貝絲を以て附着生活す．殼高 55 粍に達す．

イガヒ

Mytilus crassitesta *Lischke*

（第七十九圖版　第十六，十七，十八，十九，
二十，二十一圖）　×1

殼質稍厚く，底邊の圓き二等邊三角形をなせり．殼表には僅かの黑褐色を呈せる表皮を被むり，明瞭なる成長線を刻めり．內面は灰紅紫色に強き光澤を有せり．蝶番上の齒は顯著ならず．產卵期は一月乃至三月にして殆んご全國的に分布し北海道より南海に及ぶ．貝絲を以て干潮線以下 5 尋位迄の岩礁に附着棲息し，肉は食用こす．

クジヤクガヒ

Septifer bilocularis (*Linné*)

（第七十九圖版　第二十二，二十三，二十四圖）　×1

貝殼は稍一邊の圓き方形を呈する小形なる種なり．殼質厚く，殼頂は長く前方に向ひ，後端は圓く下方に突出せり．殼表は細かき放射脈を刻み，其放射脈は屢々二叉せり．殼頂の內面は隔板ありて，小間隙を有せり．

殼表には有毛の表皮を有し綠褐色にして，內面は美麗なる暗青色を呈せり．殼長30粍餘の小形なる貝殼にして本州，四國，九州，臺灣等に廣く分布す．

Pteria cypsellus (*Dunker*)

"Tubame-gai"

Pl. LXXIX, figs. 1, 2.　×1

Shell somewhat triangular, convex, elongately produced, posteriorly, sharply winged smooth; covered towards the margin with a fibrous epidermis. Colour, blackish, inner side is pearly white. Length about 80 mm; inhabits warm parts of Japan; attached with byssus to rocks or sea algae, not common.

Pteria brevialata (*Dunker*)

"Uguisu-gai"

Pl. LXXIX, figs. 3, 4.　×1

Shell somewhat ovate, posteriorly produced, rather thin, convex; colour yellowish brown, covered with a fibrous epidermis. Length about 70 mm.; occurs throughout central to southern Japan.

Lithophaga curta (*Lischke*)

"Isimate" or "Isiwari"

Pl. LXXIX, figs. 5, 6, 7.　×1

Shell transverse, cylindrically oblong, equivalve, extremities rounded, the anterior exceedingly short; surface of the valves covered with a brown, horny epidermis; beaks slightly prominent. Hinge linear, edentulous; ligament marginal, chiefly internal. Brownish in colour. Young stage of this species suspend themselves to rocks by a byssus, when adult they form cavities shaped like shells in rocks.

Glycimeris vestita (*Dunker*)

"Tamakigai"

Pl. LXXIX, figs. 8, 9.　×1

Shell rounded oval, slightly oblique, thick, somewhat longer than high and with beak-portion narrowed Surface of shell is ornamented with white radiating lines

Length about 80 mm.; inhabits sandy bottoms along coasts of Main Island of Japan.

Volsella barbata (*Linné*)

"Hibari-gai"

Pl. LXXIX, figs. 10, 11, 12.　×1

Shell ovately triangular in outline and obtusely pointed at the smaller end, and with the ventral margin somewhat excavated. Surface has a small growth line, but no radiating ribs; colour reddish brown and with rough epidermis. No septa as in *Septifer*. No teeth as in *Mytilus*. Distributed everywhere in Japan, and lives in shallow water attached with its byssus.

Trichomya hirsuta (*Lamarck*)

"kegai"

Pl. LXXIX, figs. 13, 14, 15.　×1

Shell arcuately oblong, posteriorly, shortly, obtusely angled, anteriorly very broad and gibbous, gaping in the middle, longitudinally densely elevately striated, shining chestnut, bearded with a fibrous epidermis. Commonly occurs along all coasts of Japan. Length about 55 mm.

Mitilus crassitesta *Lischke*

"I-gai"

Pl. LXXIX, figs. 16, 17, 18, 19, 20, 21.　×1

Shell solid, elongately subtriangular; umbo situated in quite anterior margin of shell is straight, while the posterior is roundly inflated. Outer surface of the shell covered with a blackish-brown epidermis, and with the prominent concentric growth lines. Inner colour of the shell is pale reddish purple with iridescent lustre. The teeth on hinge line are quite indistinct. Breeding season lasts from January to March. Distributed along all coasts of Japan, and lives on rocks attached with the byssus; tasty as food.

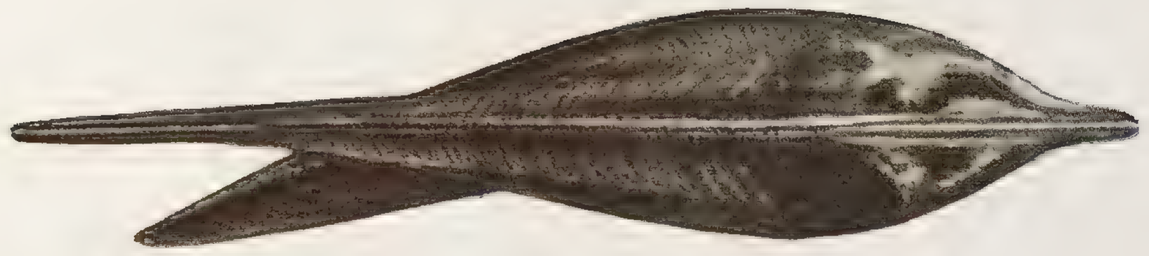
Septifer bilocularis (*Linné*)

"Kuzyakugai"

Pl. LXXIX, figs. 22, 23, 24.　×1

Shell somewhat squarely oblong, rather thick, posteriorly broadly concavely depressed, very gibbous, beaked at the umbones, anteriorly flexuously compressed, everywhere densely grooved, the ridges being granulately serrated, and here and there bifurcated; chambered within the umbones; deep blue-green.

Commonly occurs on rocky shores of open sea.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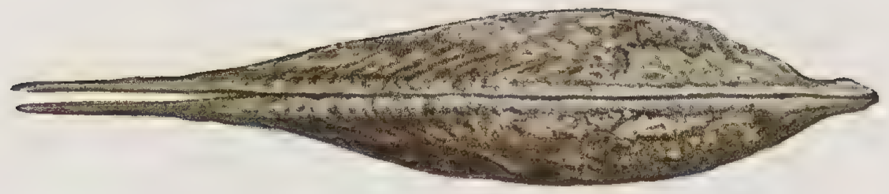
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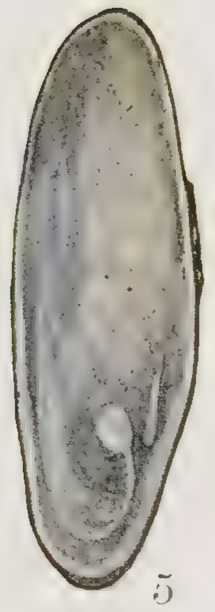
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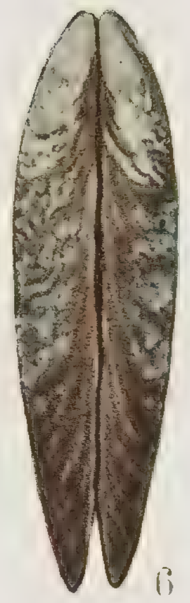
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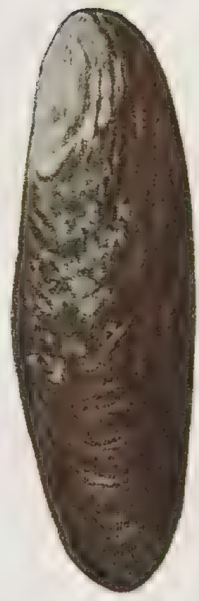
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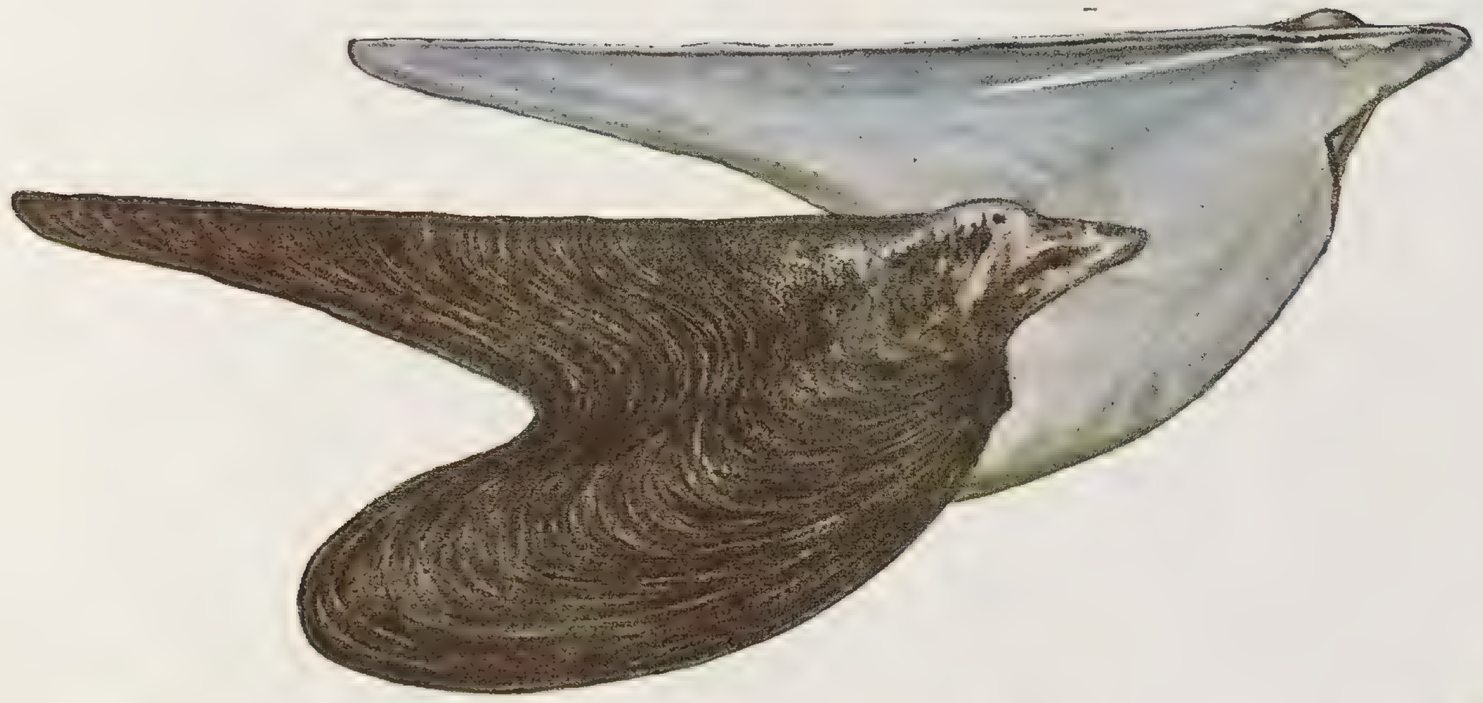
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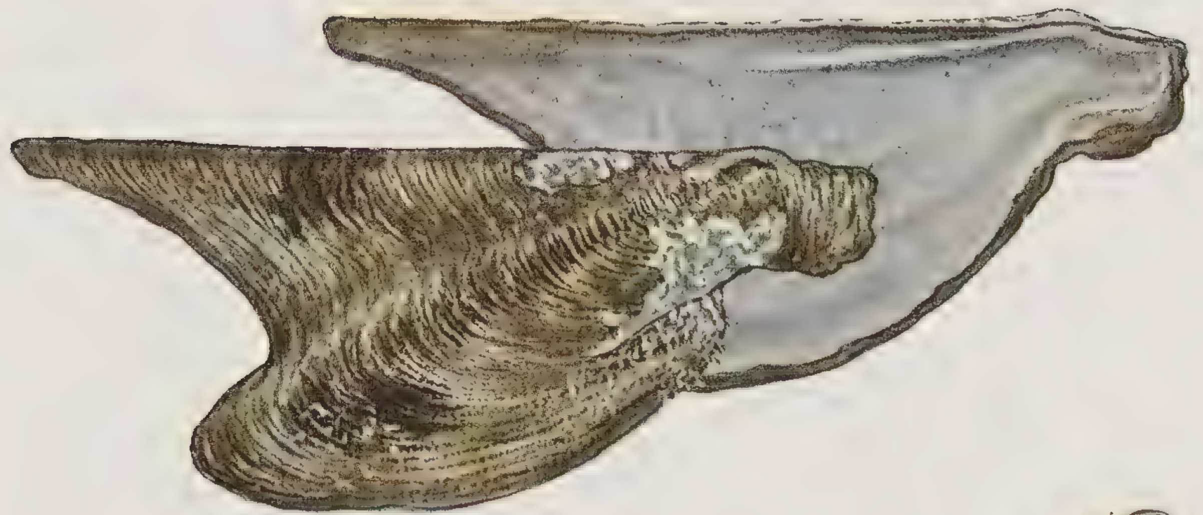
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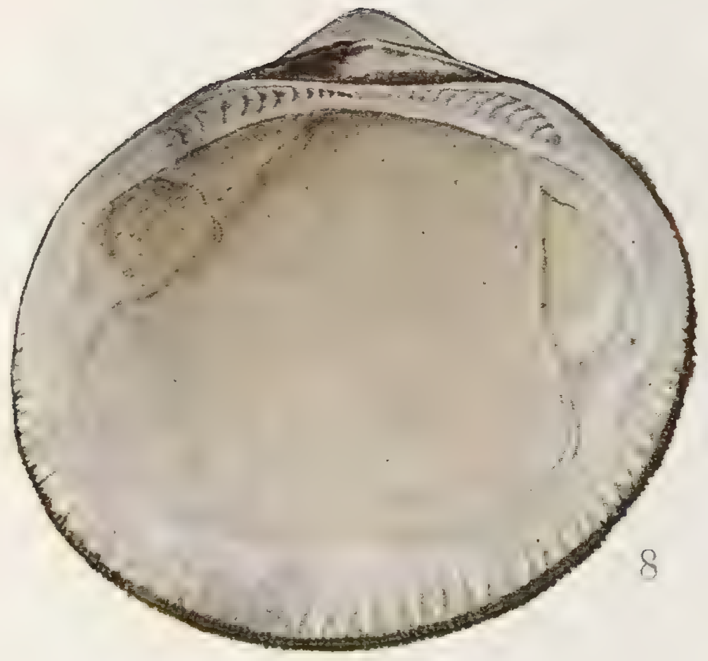
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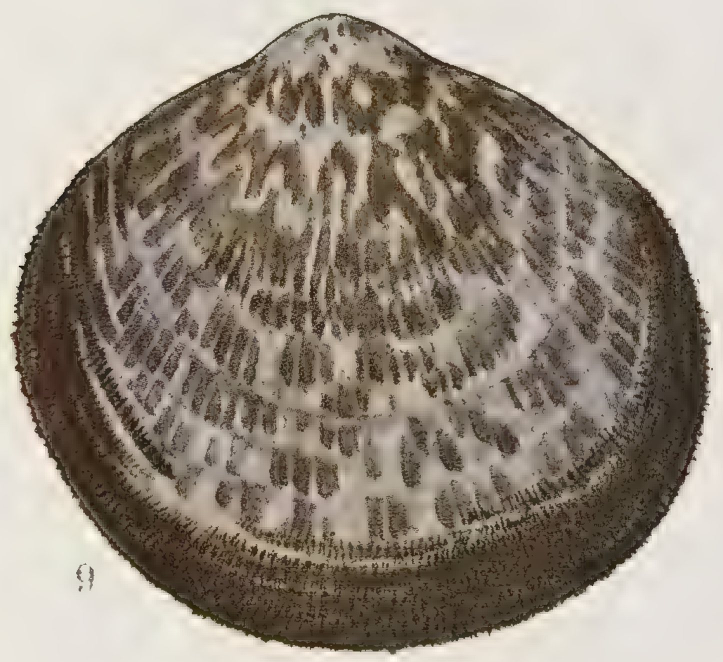
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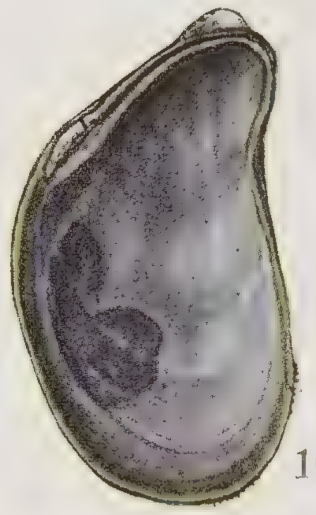
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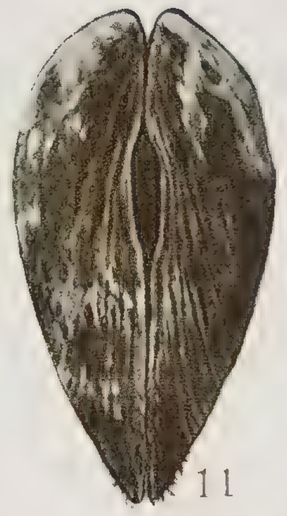
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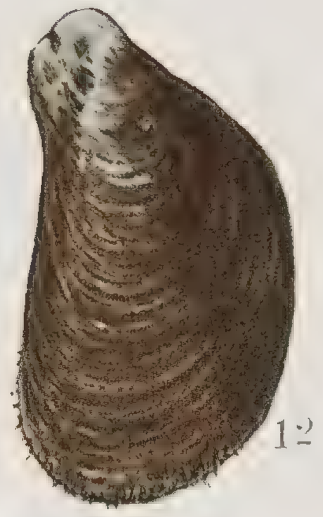
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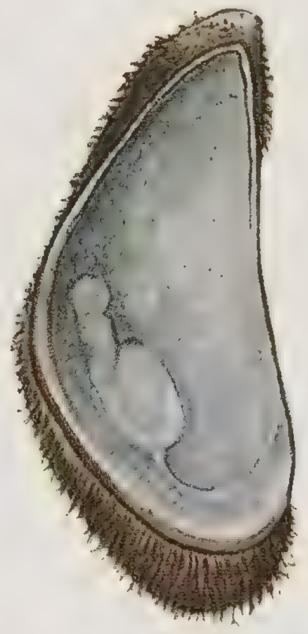
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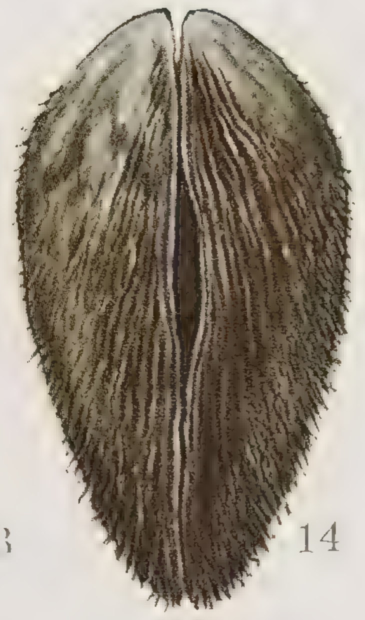
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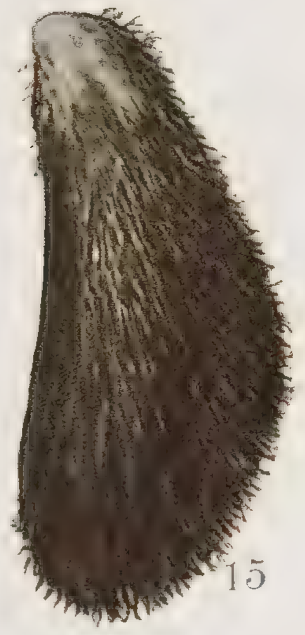
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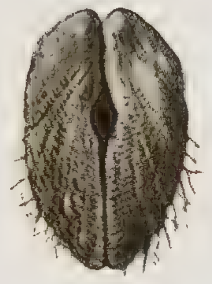
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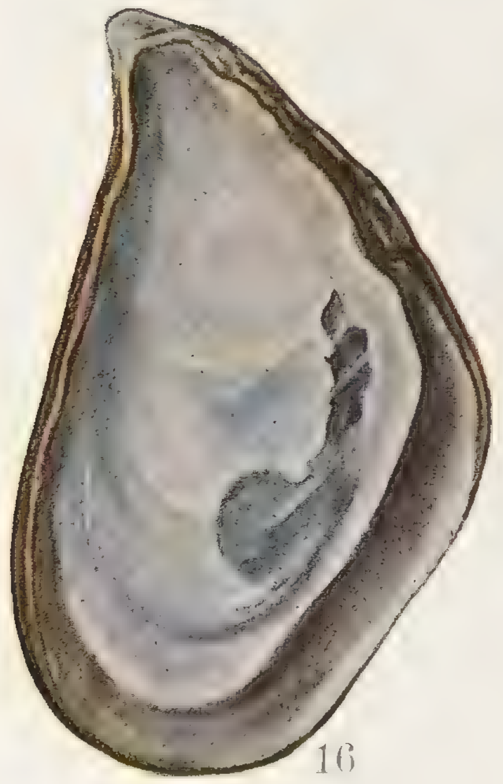
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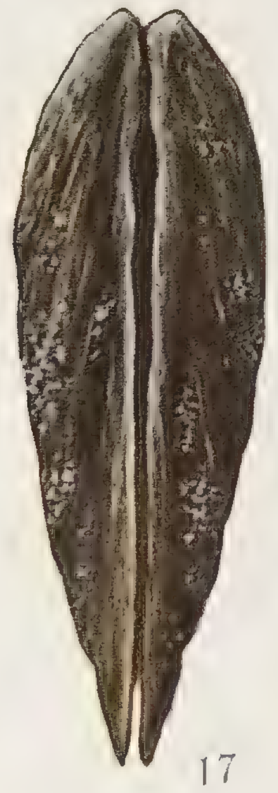
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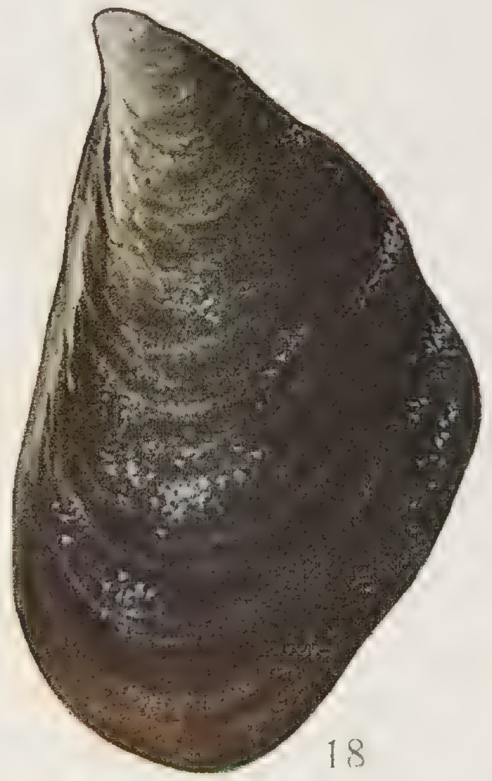
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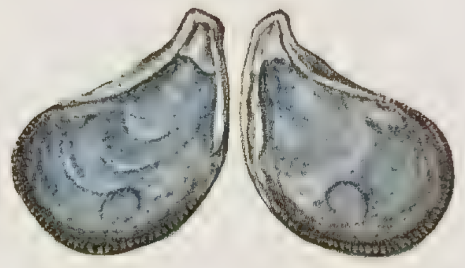
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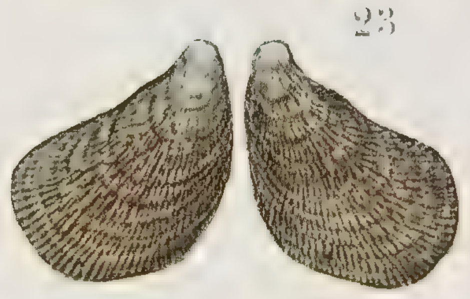
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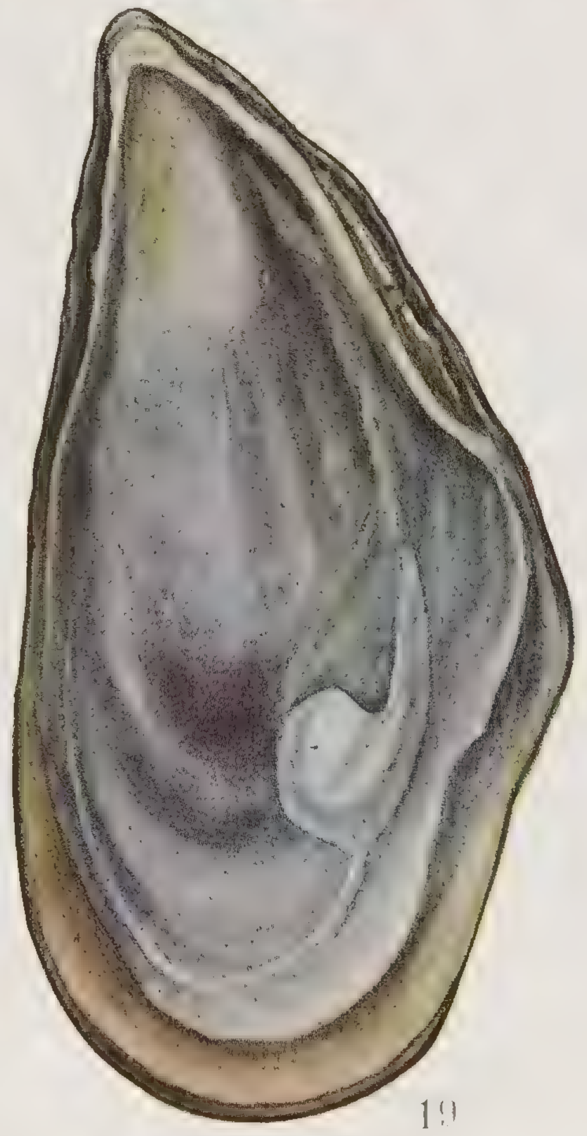
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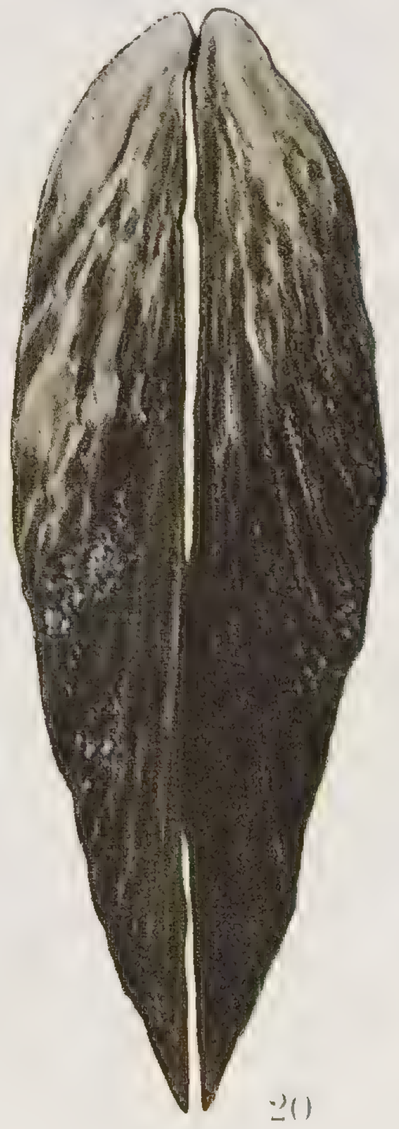
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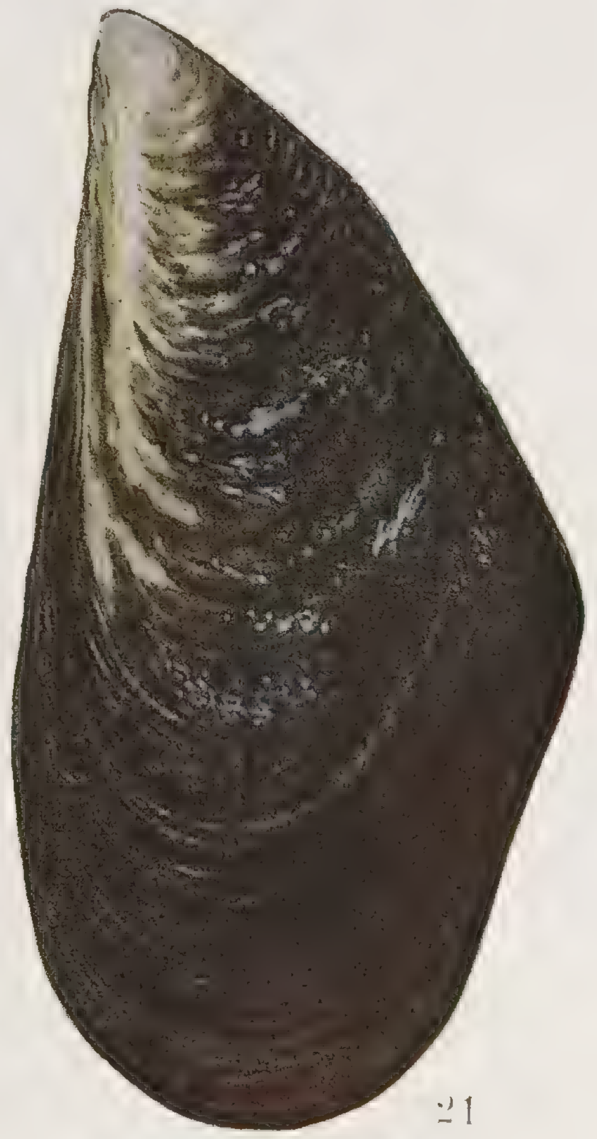
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シュモクガヒ

Malleus albus *Lamarck*
（第八十圖版　第一圖）　×1

橦木狀をなせる二枚貝にして，背緣の兩耳は前後に突出し，本體は下方に延長し稍右方に曲れり．殼表に凹凸多く，汚白色を呈し，殼質脆弱なり．殼の內面中央部は黑く，鉸部に齒を有せず．

高さ 200 粍に達し，房州より九州等．暖海に棲息す．

クロチヨウガヒ

Pinctada margaritifera (*Linné*)
（第八十圖版　第二圖）　×1

殼質稍厚き，背面濃綠色の二枚貝にして，長さ及び高さ略等しく凡そ 120 粍位の大きさあり．殼表は薄片よりなり覆瓦狀をなせり．殼の內面は眞珠光澤强く，腹緣には黑き色帶をなせり．

紀州以西の暖海に棲息し，美麗なる眞珠を產す．貝殼は貝釦の材料に用ひらる．

シンジユガヒ

Pinctada martensii (*Dunker*)
アコヤガヒ
（第八十圖版　第三圖）　×1

殼形は歪四邊形をなし，右殼は左殼より稍々小さく且淺し，殼頂は前方に偏し，右殼片の前方に稍々三角形をなせる切れ込みあり．其場所より足絲を外方へ出して外物に附着す．外面は暗褐蒼色を呈し殊に貝の周圍には薄き外皮相重層し剝がれ易し．內面は美しき眞珠光澤を帶び閃光を放つ，中央に稍々大なる後閉殼筋痕を存す．

黑潮の影響ある暖海，殊に海水清澄にして，水溫四期を通じ攝氏 10 度以上，比重 1.024 以上を保持する風波の難なき灣澳に棲息す．產卵期は每年五月より八月までの間にして殊に六，七の兩月を盛期とす．

分布廣く，太平洋岸にては北緯 35 度半卽ち房州館山灣以南に限られ，殊に三重縣英虞（アゴ）灣，五個所灣，和歌山縣田邊灣，高知縣宿毛灣，愛媛縣平城灣，長崎縣大村灣は著名なる產地なり．又日本海にては北緯 37 度半卽ち石川縣七尾灣を北限とし，隱岐，壹岐，對馬等に多少の產あり．殼長 100 粍に達す．

近年我國に於ては此貝を母貝と稱し，人爲的媒助を施して，所謂「眞圓眞珠」を形成せしむる方法を案出し，殆んど天然產の全球眞珠と區別し難き優良なる眞珠を產出するに至れり．

ハバウキガヒ

Pinnaatte attenuata *Reeve*
（第八十圖版　第四圖）　×⅔

大形なる細長き二枚貝にして，「タヒラギ」に似たれども其異る點は左右兩殼片の中央部に縱裂を存する事，貝殼細長く後方腹緣は背緣と平行し幅を增加せざる事等なり．

色彩汚褐色にして內面は僅に眞珠光澤を有す．東海より以西の砂泥底に貝絲を出して砂礫に附着し棲息す．

マベ

Pteria macropteria (*Lamarck*)
（第八十圖版　第五圖）　×⅔

斜に成長する稍大形の貝殼にして左右兩殼片は其大さを異にせり．殼頂は前方にありて前耳部に近く，後耳部は長く翼狀に突出せり．殼表は全く黑色にして成長線を明瞭に見る．內面は美麗なる眞珠光澤を有し，腹緣は廣き黑色部を有す．

本邦にては奄美大島，琉球，臺灣の暖海に棲息し，稀に大形眞珠を生じ，貝殼は貝細工，貝釦等種々に利用さる．殼長 210 粍に達す．

タヒラギ

Atrina japonica (*Reeve*)
（第八十圖版　第六圖）　×⅔

稍三角形を呈する二枚貝にして左右の殼片は殆んど等し．兩殼片の接着する直線をなす側は背面にして之に對する側は腹面なり．殼表には多數の輪脈を有し又放射脈を有す．色は暗綠色にして殼質薄く脆弱なり．

東海以西，瀨戸內海，有明灣等の砂泥底に多產し其肉柱は大形にして味ひ甚だ佳良なり．殼長約 250 粍あり．

Malleus albus *Lamarck*

"Syumoku-gai"
Pl. LXXX, fig. 1.　×1

Shell nearly equivalve, very long, compressly waved at the sides; base narrowly lobed on each side, lobes very long. Hinge toothless, with the ligament partly external on a sloping area, partly internal within a single central pit, with a small passage for the byssus.

The term Malleus, signifying a mallet or hammer, aptly designates this form.

Shell attains to a length of 200 mm.

Inhabits warmer part of southern Japan.

Pinctada margaritifera (*Linné*)

"Kurotyö-gai"
Pl. LXXX, fig. 2.　×1

Shell orbicular, flatly convex, straight at the upper part, slightly sinuated on the posterior sides, everywhere concentrically laminated, laminæ produced towards the margin into longitudinal rows of scales, scales more or less irregularly twisted; greyish-olive, green near the umbo.

Shell about 120 mm. in length.

Found throughout tropical and subtropical seas of southern Japan.

Pinctada martensii (*Dunker*)

"Sinzyu-gai" or "Akoya-gai"
Pl. LXXX, fig. 3.　×1

Shell orbicular, flatly convex, straight at the upper part, scarcely sinuated posteriorly, everywhere concentrically scaled, densely scaled toward the margin.

This fine species is the well-known pearl oyster in Japan, and is cultured at Prefectures of Mie, Ehime, and Nagasaki, etc.

Pinna attenuata *Reeve*

"Habôki-gai"
Pl. LXXX, fig. 4.　×⅔

Shell elongately fan shaped, with a longitudinal streak on central part, near umbo; shell attains to a length of 330 mm. long and 100 mm. width.

Colour blackish brown above, pearly white inner side, reddish on margin.

Distributed throughout central and southern Japan.

Pteria macropteria (*Lamarck*)

"Mabe"
Pl. LXXX. fig. 5.　×⅔

Shell longitudinally somewhat squarely oblong, oblique, more or less gibbous, brown back, solidly horny, faintly rayed, more or less covered toward the margin with minutely cuspidate brown scales; very inequilateral at the upper part, anterior extremity produced into a very long narrow wing.

Atrina japonica (*Reeve*)

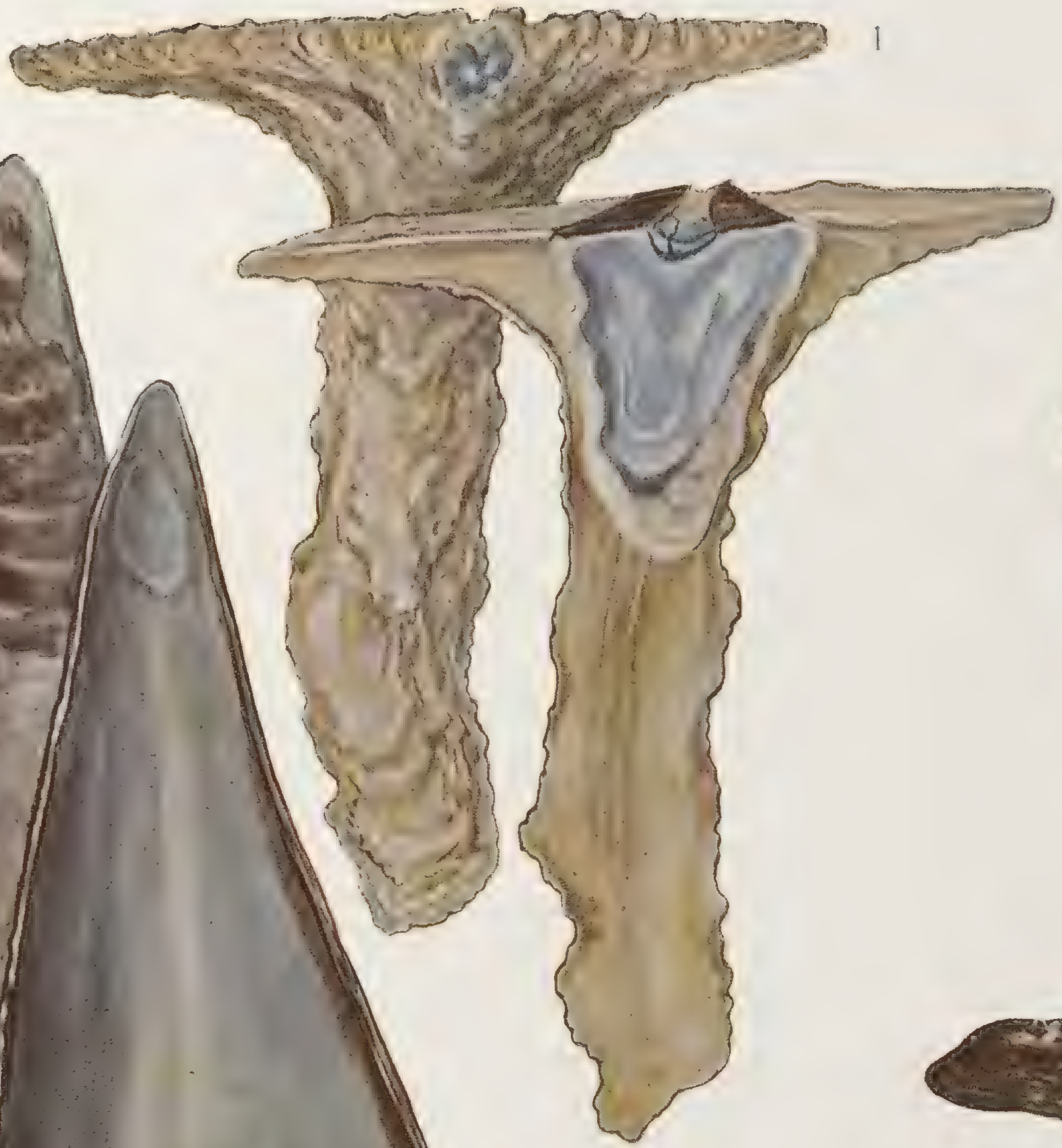
"Tairagi"
Pl. LXXX, fig. 6.　×⅔

Shell somewhat triangularly fan shaped, thin smooth, olive-ash, posterior side radiately ridged, ridges rather irregular, anterior side concentrically finely rugose, posterior margin sparsely scaled.

Shell attains to a length of 300 mm. and a width of 150 mm.

Colour blackish green, found on the muddy bottoms at 10-20 metres depth of inner bay.

The adductor muscle of this shell is very tasty.



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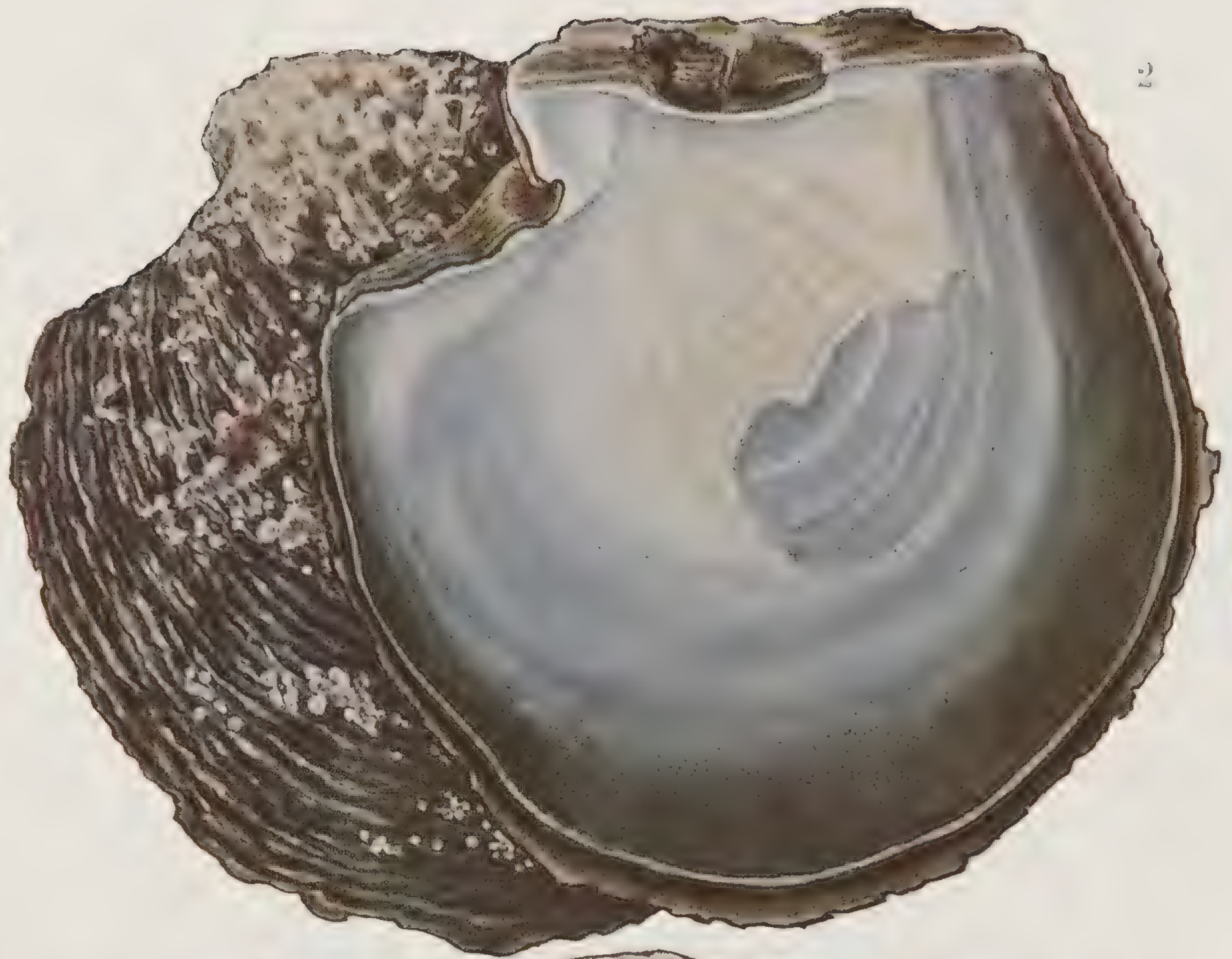

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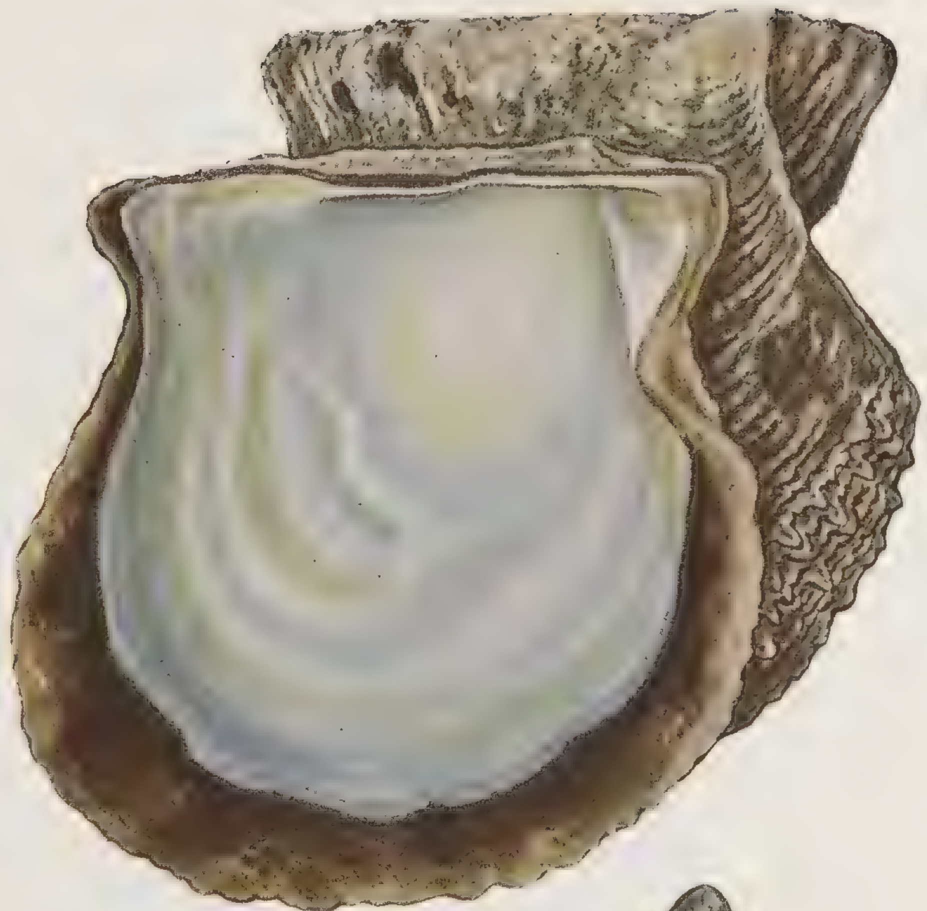

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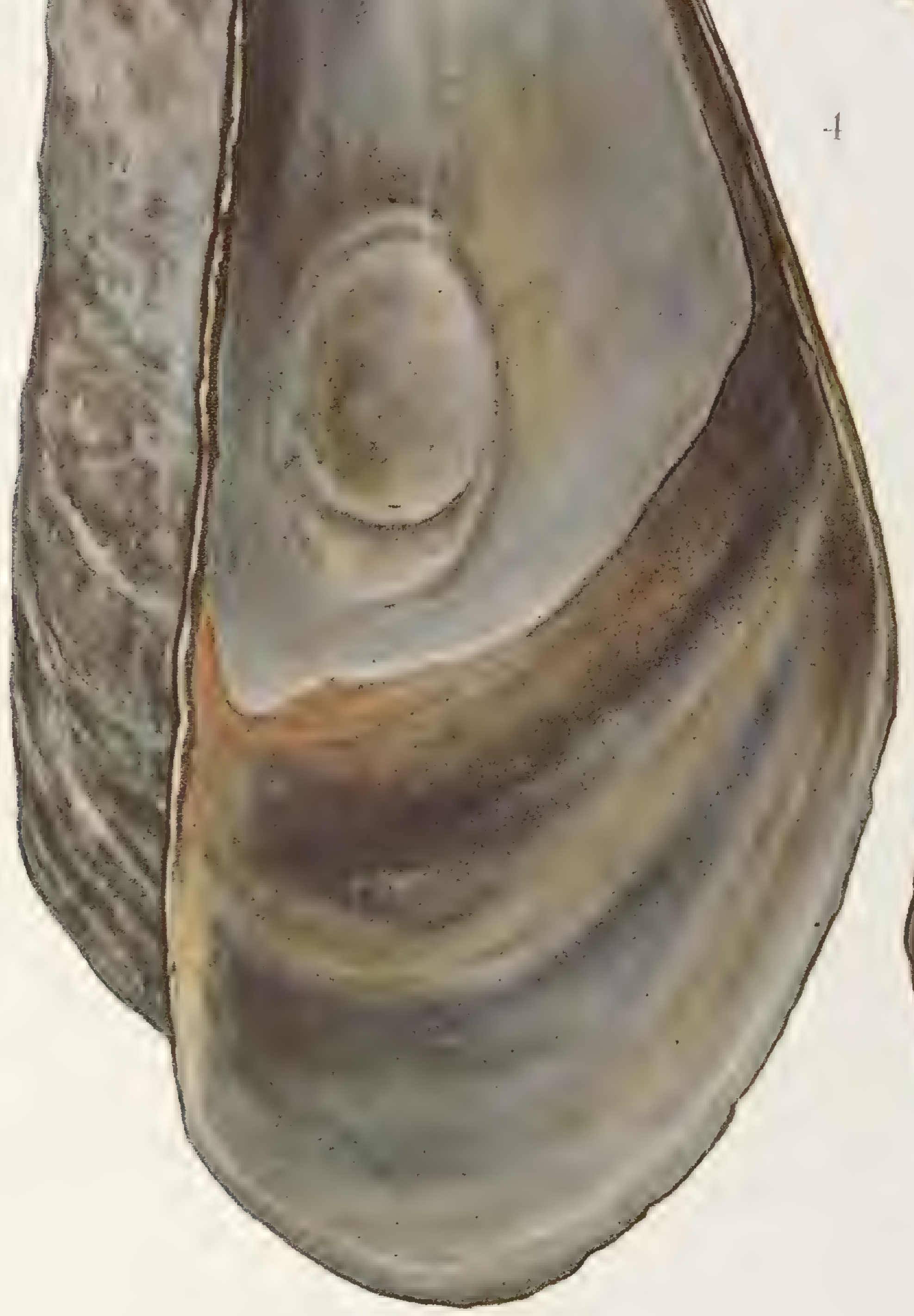

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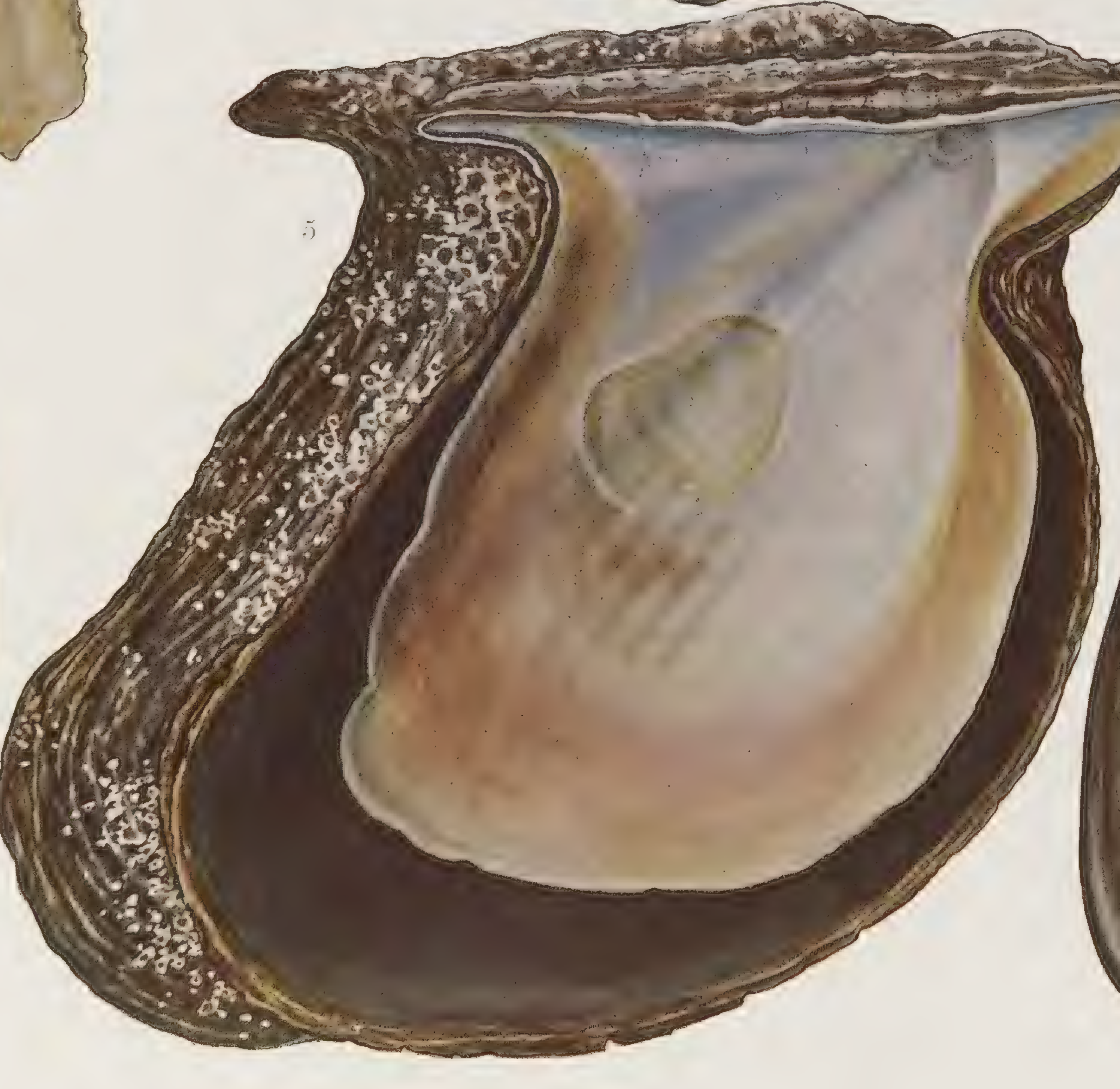

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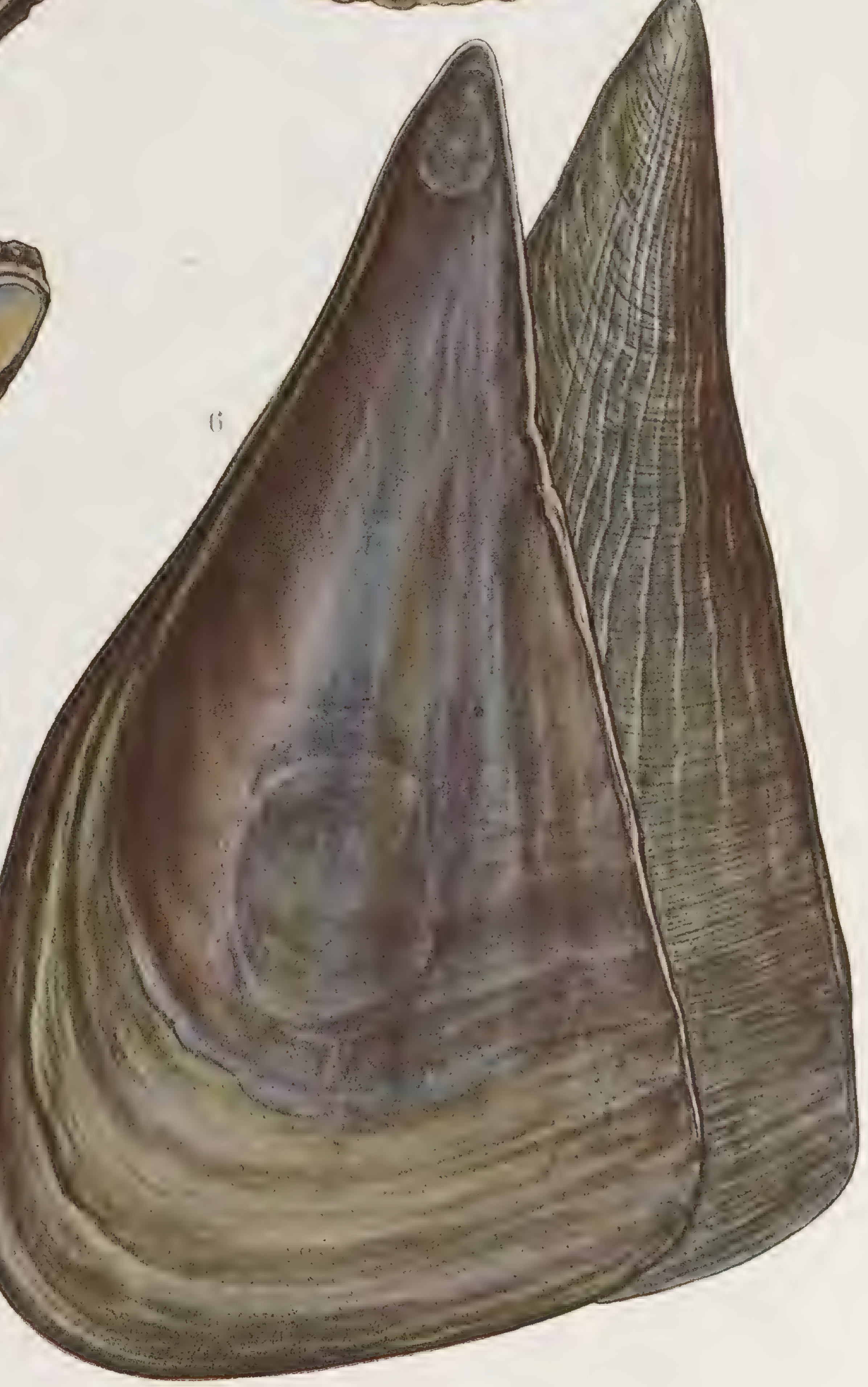

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イタボガキ

Ostrea denselamellosa *Lischke*

（第八十一圖版　第一圖）　×1

貝殼は堅固にして稍圓く，背線に耳狀突起を有す．右殼片は扁平に近く，其表面には細き鱗狀片密に重なり，腹緣に近づくに從つて顯著となる．左殼片は稍凹みその殼表には管狀の放射肋と若干の薄片を有す．殼色は暗灰色なり．殼の內面は白色にして，稍眞珠光澤を有す． 產卵期は五月乃至九月頃にして雌雄同體なり．

殼高 86 粍，殼長 65 粍位に成長し，九州，瀨戶內海等に饒產し又日本海方面にも產す．肉は頗る美味にして優良なり．

マガキ

Ostrea gigas *Thunberg*

（第八十一圖版　第二，三圖）　×1

貝殼は長卵圓形にして，殼頂稍尖り腹緣は丸味を帶び少しく波狀を呈す．殼表には多くの鱗狀片を有し淡褐色の地に殼頂を起點とし放射狀に濃紫色の縱線數本を有す．左殼片は大きくして凹み生時常に之を下にして肉を收め，右殼片は扁平にして蓋となる．殼の內面は白く肉柱痕は栗色を帶ぶるもの多し．400 粍以上に成長する「ナガガキ」は東北及北海に產し本種と同一なりと認めらる．

殼高 80 粍乃至 120 粍に成長す．殆んど全國的に分布し．內灣沿岸の岩礁等に附着生活をなす．養殖盛んに行はれ產業上重要なり．肉は美味且優良なり．

ケガキ

Ostrea echinata *Quoy et Gaimard*

（第八十一圖版　第四，五圖）　×1

貝殼は小さく稍丸く，背線は稍尖る．左殼片は丸く脹らみて深く，右殼片には黑紫色の管狀棘突出す．

殼高 30 乃至 50 粍位にして，外海滿潮線附近の岩礁に群棲生活をなし本邦中部及南部の暖海に分布す．

トサカガキ

Ostrea cristagalli (*Linné*)

（第八十一圖版　第六圖）　×1

貝殼は著しく深く，角張れる襞を有し，各襞には顆粒狀の縱線あり．殼表は紫褐色或は菫色，內面は褐色にして光澤を有す．蝶番線は廣く扁平なり．左殼片の前緣部にて岩石等に着生し，殼長 70 粍位に達し琉球諸島及臺灣等の暖海に產す．

スミノエガキ

Ostrea rivularis *Gould*

（第八十一圖版　第七圖）　$\times {}^2/_3$

貝殼幼時は圓形なれども，成長せるものは殼質强厚にして長卵形を呈す．左殼表面には鱗狀片不明瞭なるも，右殼片には薄く滑かなる鱗狀片を有す．殼の腹緣には殆んど襞なく，殼表は鈍黃色の地に放射狀に多くの暗褐色帶を有す．閉殼筋痕は殼の略中央に在り．

殼高大なるは 200 粍に達し九州有明灣に於て著名なり．朝鮮南部にも產す．

イハガキ

Ostrea circumpicta *Pilsbry*

コケゴロモ

（第八十一圖版　第八圖）　×1

貝殼は重厚にして長卵形をなし，右殼表には殼頂を中心に粗き葉狀片を重ね腹緣の襞極めて弱し．左殼は深く凹む．殼表は暗赤灰色にして，內面は金色を帶びたる眞珠光澤を呈し，周緣は暗褐色を彩る．

暖流の影響を受くる太平洋及日本海に廣く分布し，深さ干潮面より 30 米の岩礁に棲息す．

Ostrea denselamellosa *Lischke*

"Itabogaki"

Pl. LXXXI, fig. 1.　×1

Shell solid, suborbicular; densely squamose towards the margins; dorsal margin auriculated on each side when normally developed, posterior margin excavated on the side, acutely produced at the ventral margin; right valve flattened, closely scaly and ribbed; left valve convex, closely divergent ribs, some of them prominently tubercularly spinose.

Outer colour of shell varies from pale pinkish cinnamon to light vinaceous fawn; while the inner colour is porcelain white, sometimes with some subpearly parts and spotted with pale green flecks.

Hermaphroditic; spawning season continues from May to September. Distributed in the coasts of the Pacific Ocean and Japan Sea, under the influence of the warm current.

Ostrea gigas *Thunberg*

"Magaki" "Nagagaki"

Pl. LXXXI, figs. 2, 3.　×1

Shell elongated, trigonal, very foliacious towards the ventral margin of right valve; left valve rather convex, foliaceous, slightly plicated, hinge produced and acuminated.

The outer colour of shell spotted and striped with purplish black, on the ground colour of whitish yellow; the inner is pure white with porcelain lustre. Very long forms, so-called "Nagagaki" (long oyster) type, as long as 400 mm. up, were identified in the very old specimens of this species.

Widely distributed on the coast of Japan, from Hokkaido to Formosa, and cultivated for commercial purpose. Inhabiting from high tide mark to a depth of 5 fathoms, in comparatively shallow bays with inflowing fresh water.

Ostrea echinata *Quoy et Gaimard*

"Kegaki"

Pl. LXXXI, figs. 4, 5.　×1

Shell compressed, thin, acuminated towards the hinge, roundish beneath, sometimes lower valve deeply concave; upper valve armed with tube-shaped blackish purple outstanding spines.

This species occurs attached to rocks just below high tide mark on both coasts of the Pacific Ocean and Japan Sea.

Ostrea cristagalli (*Linné*)

"Tosakagaki"

Pl. LXXXI, fig. 6.　×1

Shell strongly plicated, folds angular and deep, divergently granularly striated; outer surface of the valve purplish brown, or pansy purple in colour, but the inner brown and lustrous.

Hinge wide, flattened; adhering to stones and rocks by the anterior end of lower valve. This species occurs in warm regions such as Ryu-kyu Islands and Formosa.

Ostrea rivularis *Gould*

"Suminoegaki"

Pl. LXXXI, fig. 7.　$\times {}^2/_3$

Shell orbicular in the young but elongated oval in the old specimens, thick and strong; lamellae of the right valve thin and smooth, while they are generally indistinct in the left valve. No distinct plications are recognizable. Outer colour of shell is cream-buff with many radial chocolate bands. The position of muscular impression is near the center or a little dorsally. It attains 200 mm. in height of shell.

This species occurs abundantly in Ariake Bay of Kyusyu and southern coasts of Korea.

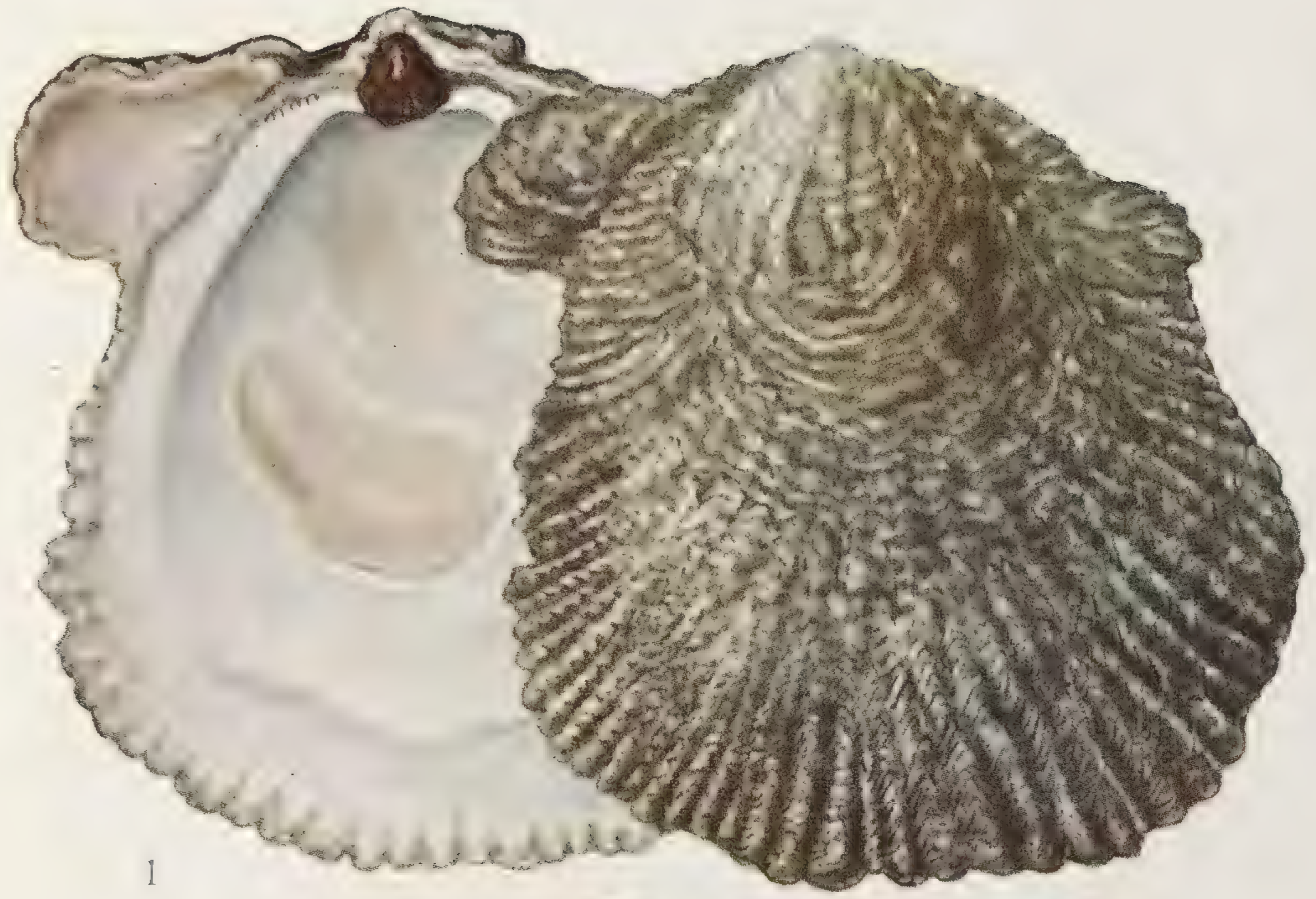
Ostrea circumpicta *Pilsbry*

"Iwagaki" "Kokegoromo"

Pl. LXXXI, fig. 8.　×1

Shell elongate oval, thick; right valve rather short compressed, lamellae concentric but mostly fused and brocken at the margin; left valve deeply excavated. Scarcely plicated on the ventral margin of right valve.

Outer colour of right valve is gray with dark mineral red, whereas inner colour is generally subpearly with golden lustre, and especially liver brown at the margin. Distributed in both coasts of the Pacific Ocean and Japan Sea influenced by the warm current. This species lives from the low tide mark to the depth of 30 metres.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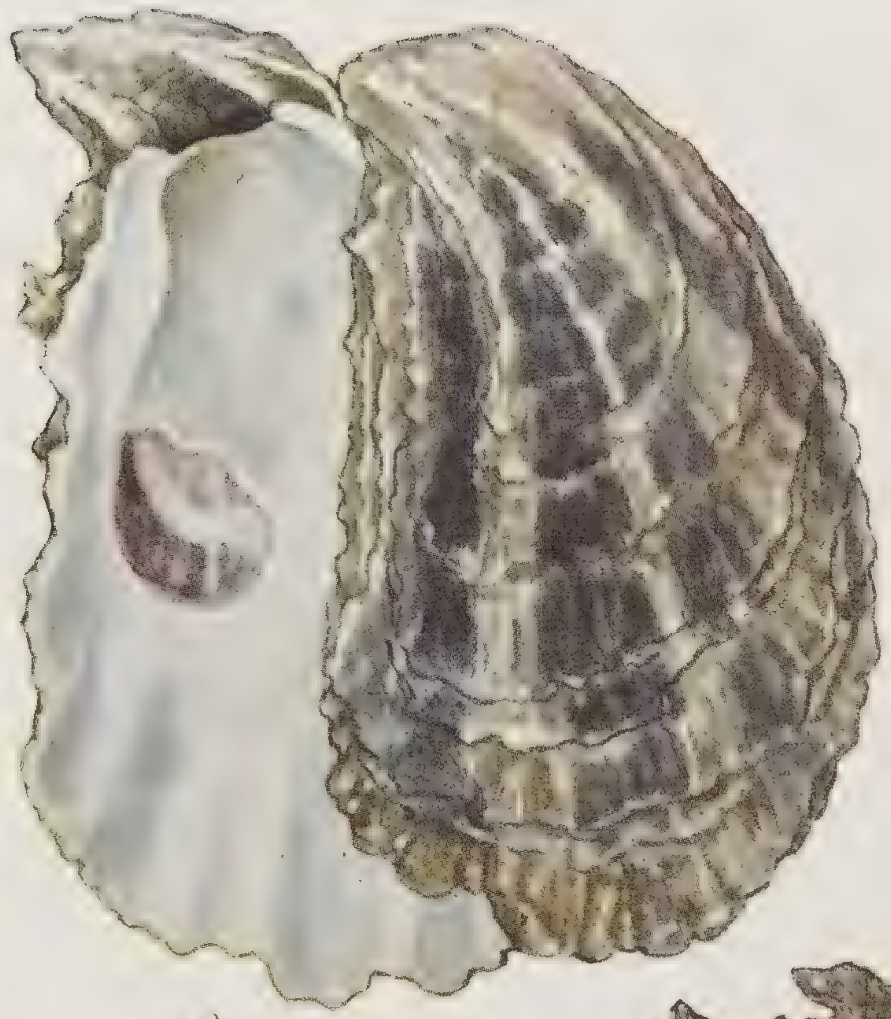
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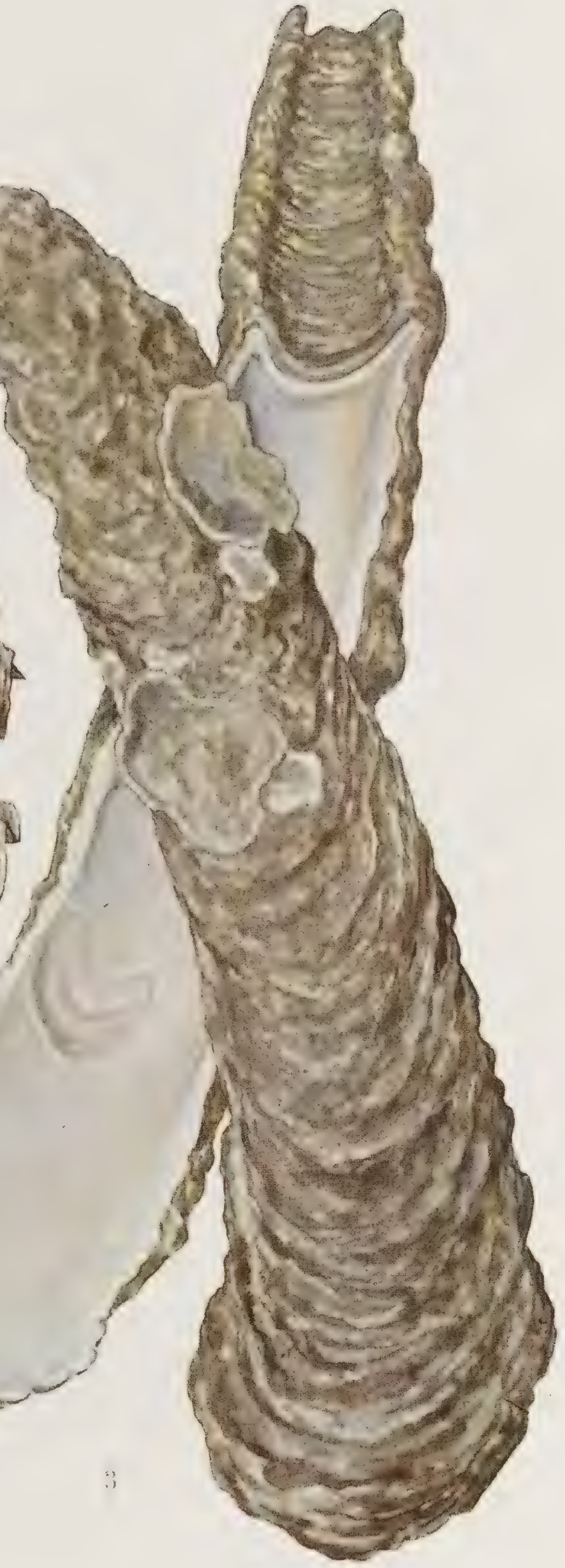
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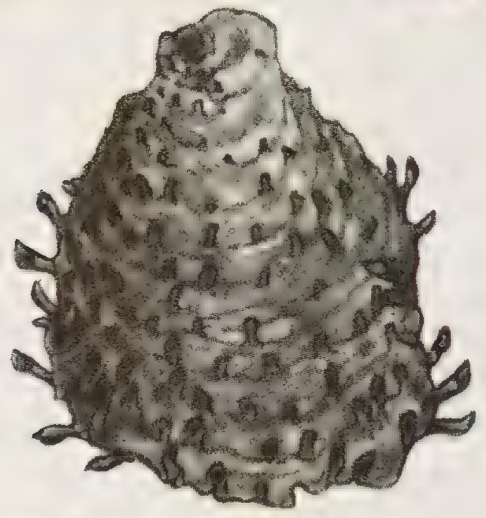
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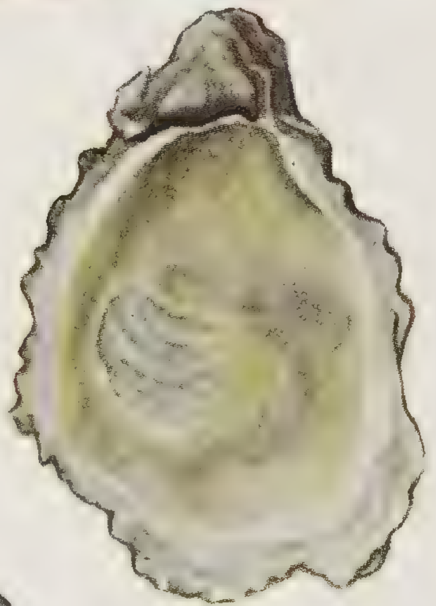
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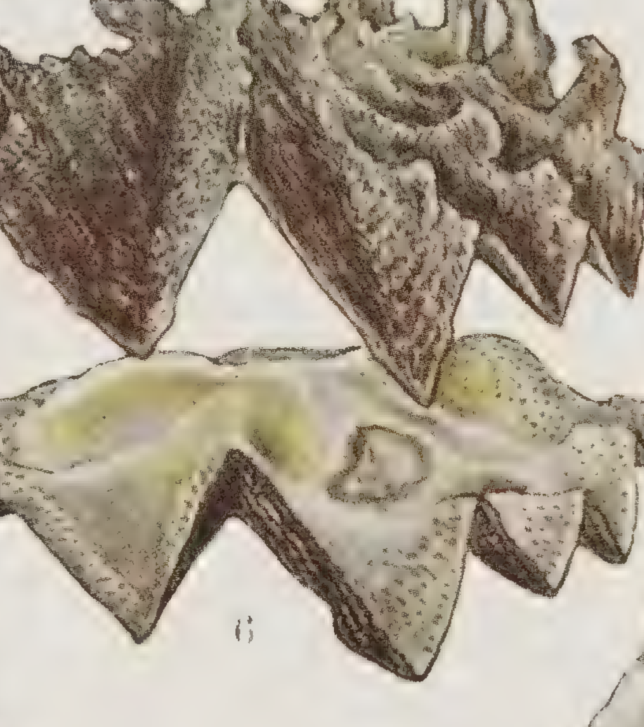
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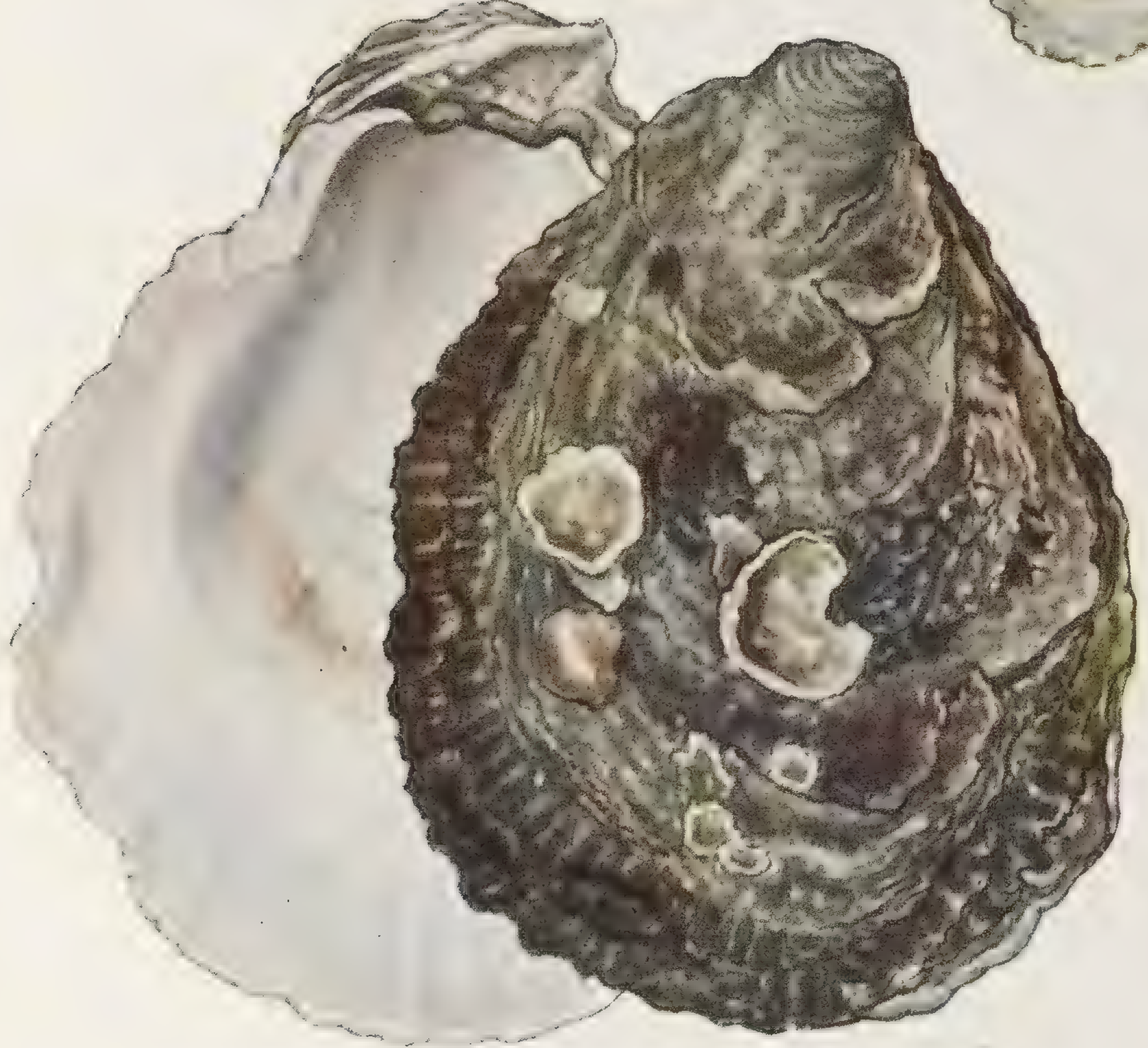
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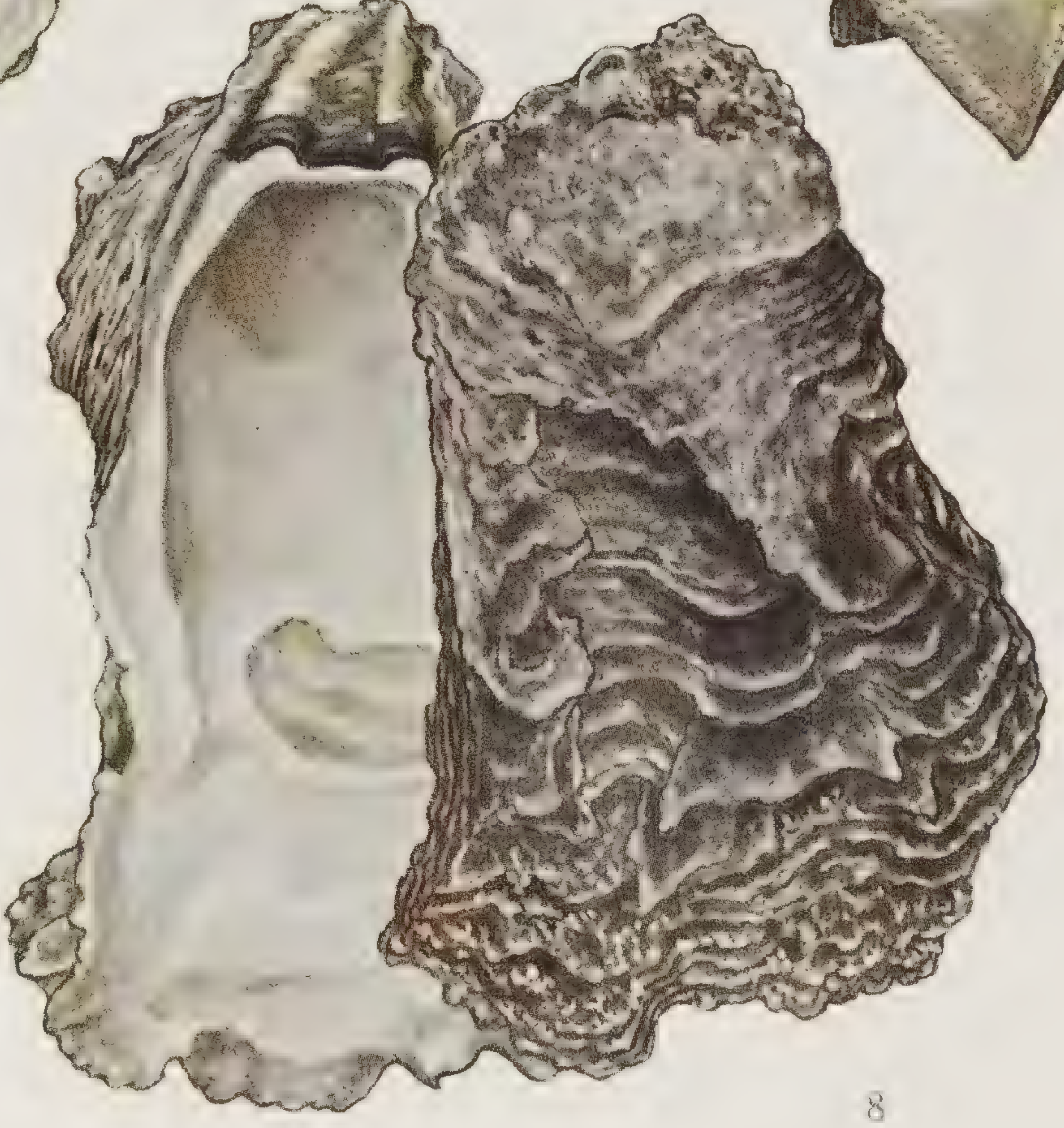
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イタヤガヒ

Pecten laqueatus *Sowerby*

（第八十二圖版　第一圖）　×1

圓形なる二枚貝にして，左右兩殼片は甚だしく異なれり．卽左殼は全く扁平にして殼頂近くは稍凹める傾向あり．右殼は甚しく膨出せり．殼表の放射肋は約13條なり．

本邦一般に分布し殊に石川，鳥取の兩縣沖合に群棲せる所ありたり．肉柱は食用に供し又煮乾して販賣せらる．右殼は貝杓子に用ふる所あり．殼長 100 粍前後に達す．

ホタテガヒ

Pecten yessoensis *Jay*

（第八十二圖版　第二圖）　×1

貝殼は大形にして殆んご圓く，左右兩殼片の膨みは稍異り，右殼は殆んご扁平にして，左殼は膨大せり．表面放射肋の數は 25 條內外なり．殼の表面は汚淡紅色にして內面は白色なり．最も成長せるものは殼長 200 粍に達す．

東北，北海道，樺太等の寒海に分布し，殊に靑森灣，根室の沿岸に饒產す．產卵期は 2-3 月頃にして稚貝は初め海藻等に附着すれご も少しく成長すれば海底に落ちて棲息するに至る．生時は左殼を下にし砂中に埋れ僅に腹緣のみを砂上に出し，時に介殼を急激に開閉し水中を游泳する事あり．肉柱は大形にして，甚だ美味なり．煮乾したるもの或は罐詰さして支那に輸出す．右殼は小鍋代用に用ゐ，又貝灰の原料さなす．

キンチヤクガヒ

Chlamys plica (*Linné*)

（第八十二圖版　第三，四圖）　×1

巾着形をなせる二枚貝にして，高さ 60 粍位の貝殼なり．前後の兩耳は殆んご同形にして，殼の下方膨れ，巾着の如き外觀ある故に此名あり．殼表には約 5 條の太き隆起脉を有す．色彩甚だ變化に富み，紫紅色，黃褐色，赤褐色等の斑紋を存す．殼緣は細かき鋸齒をなせり．

東海より九州の海に至る沿岸に產し，岩礁等に貝絲を以て附着棲息す．

アズマニシキ

Chlamys farreri nipponensis *Kuroda*

（第八十二圖版　第五，六圖）　×1

扁平なる二枚貝にして，兩殼片の膨みは略同樣なれご左殼片の方稍膨大せり．耳狀突起不同にして，前耳部長く後耳部短かし．放射肋の肋間には更に小なる 2-3 條の小脈を有し，肋脈には逆鱗を具へり．

殼長 100 粍內外，殼色暗紫色，鮮紅色，或は暗黃色等ありて一樣ならず．肉柱は美味にして食用に供し，或は煮乾して支那に輸出す．

ヒアフギ

Chlamys senatoria nobilis (*Reeve*)

（第八十二圖版　第七圖）　×1

稍圓形なる貝殼にして，左右殆んご等しく，殼表の放射肋は 24 條內外ありて，更に其肋間には 1 條の細脈あり．肋上は密に鱗狀隆起薄板を具ふ．殼高 100 粍餘に達し，淡褐，紅色，黃橙色，紫色等美麗なる色彩の變化多し．肉柱佳味にして食用に供す．

ツキヒガヒ

Amusium japonicum (*Gmelin*)

（第八十二圖版　第八圖）　×1

殆んご圓形の二枚貝にして，殼高 100 粍內外あり．殼表は甚だ滑かにして，細かき成長線を刻す．內面には 44-46 の放射肋ありて 1 對づつ並列せり．左右兩殼の色彩甚だ異なり，右殼は全體赤褐色，左殼は黃白色を呈するを以て，月日介さ稱せらる．

東海より九州，琉球に至る間分布し 10-20 米の砂泥底に棲息す．肉柱は大にして，頗る佳味なり．介殼は貝細工及小皿の代用に用ゐらる．

Pecten laqueatus *Sowerby*

"Itaya-gai"

Pl. LXXXII, fig. 1.　×1

The right valve is very convex with broad, flat, radiating ribs, whose number is normally eight, with one or two, rarely three, narrow secondary ribs on both sides of the shell. The left valve is slightly concave with narrower, flatly rounded radiating ribs whose normal number is seven or eight. The ears nearly equal, with a shallow notch below the anterior one. Widely distributed northern to southern Japan. Adducter muscle very tasty.

Pecten yessoensis *Jay*

"Hotategai"

Pl. LXXXII, fig. 2.　×1

The shell form is orbicular, inequilateral and radiately ribbed. The right valve is tolerably convex with somewhat unequal ears, while the left valve is nearly flat with ears equal. The ribs on the right valve are about twenty-two, broad and flattish, subequal, broader than the interspaces, now and then divided into equal or unequal halves by a longitudinal groove. Those on the left valve are somewhat more in number, also flattish towards the ventral margin, but generally narrower than the interspace. The adductor muscle of this species is very tasty.

Chlamys plica (*Linné*)

"Kintyaku-gai"

Pl. LXXXII, figs. 3, 4.　×1

Shell triangularly ovate, nearly equivalve, equilateral, sides compressed towards the umbones, ears rather small, equal; valves striated throughout, rayed with three to five ribs, ribs of the left valve rounded, raised, slanting down near the margin of the right valve, broader, convex, less raised; left valve fulvous-white, broadly marbled with chestnut-red, right valve white, unspotted.

Chlamys farreri nipponensis *Kuroda*

"Azumanisikī"

Pl. LXXXII, figs. 5, 6.　×1

The inequality of ribs in this species, is especially conspicuous on the left valve, the larger ones among them showing rough and high erect scales which may be many or few and are generally at unequal distances from one another.

Shell measures about 75 mm. in length, 83 mm. in height, 20 mm. in depth.

Chlamys senatorias nobilis (*Reevė*)

"Hiôgi"

Pl. LXXXII, fig. 7.　×1

Shell equivalve, somewhat gibbous, radiately ribbed, ribs two-and-twenty, rounded rather raised, concentrically finely closely squamately ridged, interstices rather broad, longitudinally three-grooved; flesh-white, spotted and variegated throughout with rose-red; ears very unequal, radiating squamately ridged.

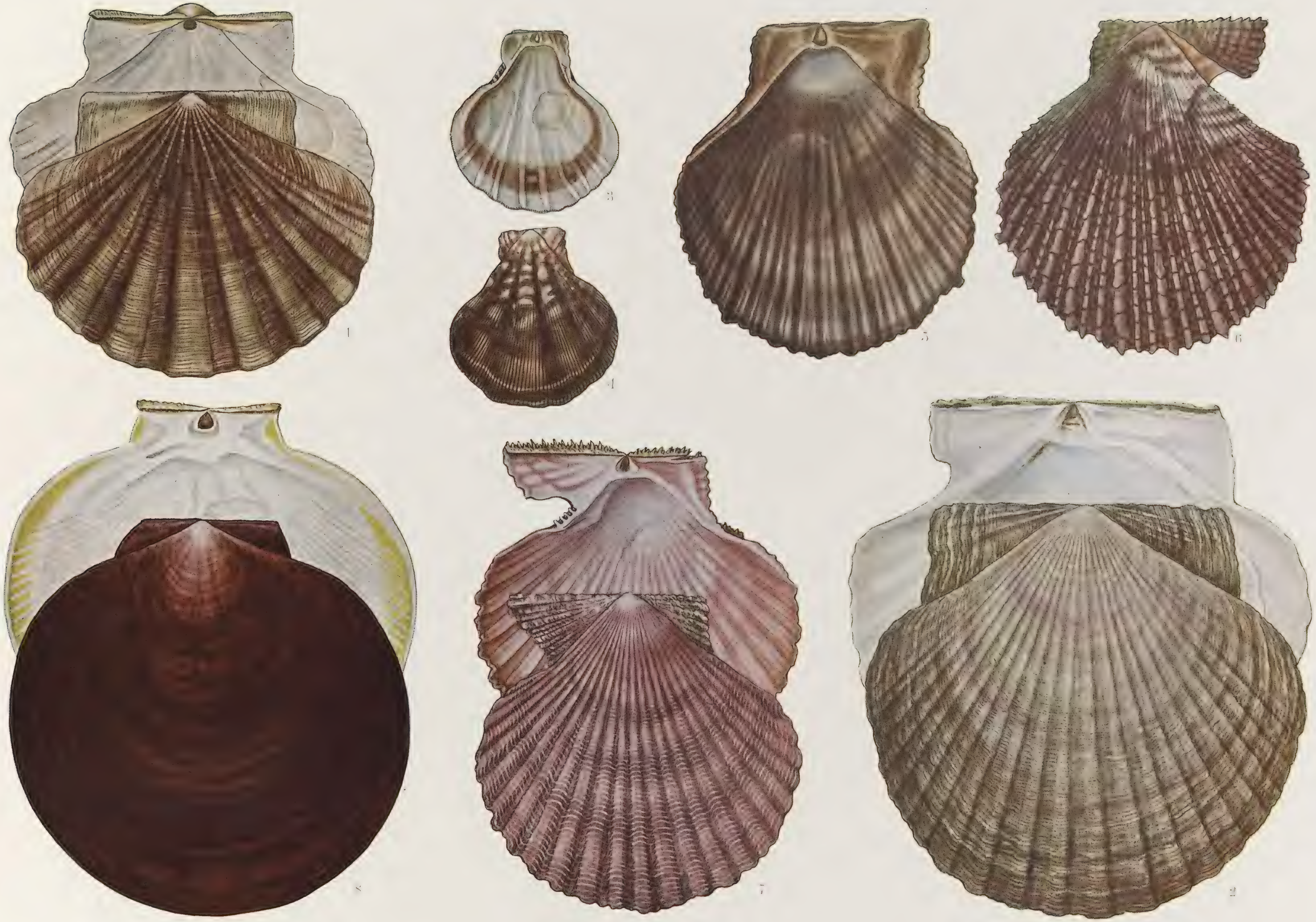
Amusium japonicum (*Gmelin*)

"Tukihi-gai"

Pl. LXXXII, fig. 8.　×1

Shell orbicular, compressed, gaping on each side, nearly equilateral, equivalve; valves outside smooth or very finely concentrically striated brown-red, inside rayed with from forty-four to forty-six narrowish ridges, arranged two and two, white, yellowish near the margin; ears equal and small.

第八十二圖版　　PL. LXXXII



ヤマトシジミ

Corbicula japonica *Prime*

（第八十三圖版　第一，二圖）　×1

貝殼は卵三角形にして殼頂膨る．幼貝は帶黃褐色に放射線條を有するも，生成すれば黑褐色の雲紋帶を有し尙老成すれば麗しき漆黑となり，輪脈は粗く不明瞭なり．殼の前端は丸く，後端は少しく突出す．蝶番線は狹き方にして前側齒よりも長く輝き弧線を畫く．殼の內面は乳白色にして窩心部に紫斑を有するか或は淡菫色を呈す．

殼長 41 粍，殼高 37 粍位．近畿地方を中心とし，本州，四國，九州に產し，肉は食用となる．

セタシジミ

Corbicula sandai *Reinhardt*

（第八十三圖版　第三，四圖）　×1

貝殼は鈍三角形をなし殼頂は著しく突出す．幼貝より老貝に至るまで表皮色彩の變化多く又產地により色彩に多少の相違を來し種々の稱呼を附せらる．殼の前端は丸く後端は長く，輪脈は粗く且明瞭なり．蝶番線は太く前側齒の末端は肉柱に添ひ彎曲し，後側齒は長く直線なり．靱帶は強く且突出す．殼の內面窩心部は乳白色を呈し，套痕線外は濃紫色を彩る．

殼長 34 粍，殼高 31 粍位．琵琶湖の特產にして，淺き砂質の水底に棲息し，肉は食用に供せらる．

マシジミ

Corbicula leana *Prime*

（第八十三圖版　第五，六圖）　×1

貝殼は略三角形，殼頂は稍前方に傾き後端は少しく長し．殼表には粗き輪脈を有し，幼貝は淡靑色にして殼頂には褐色の斑點を有するも，老成したるものは黑褐色を呈す．主齒は 3 個，兩側齒は長く約 60 度に開き，齒丘には荒き縮緻の彫刻を有す．殼の內面は濃紫色を呈し窩心部の方淡し．

殼長 44 粍，殼高 39 粍位．本邦產蜆中最も普通なるものにして廣く分布す．肉は食用に供す．

ナリヒラシジミ

Corbicula leana orthodonta *Pilsbry*

（第八十三圖版　第七，八圖）　×1

貝殼は稍大きく鈍三角形を呈し，殼質は薄く輪脈は細く光澤を有す．幼貝は黑色の斑紋帶を有するも，老成したるものは黑色となる．殼の內面は淡紫色を呈す．

殼長 50 粍，殼高 46 粍位．原產地は東京隅田川特產なりしが現今殆んど絕滅せるもの丶如く，諏訪湖及其附近にも分布す．

ニホンシジミ

Corbicula nipponensis *Pilsbry*

（第八十三圖版　第九，十圖）　×1

貝殼は栗實の如き三角形で，幼貝は帶黃褐色の地に黑色の同心雲紋帶を有し，放射條紋有り．輪肩は滑にして內面は白色を呈するも老成したるものは漆黑の如き艶を有し，輪肩は密集し，殼の內面菫色を呈する事あり．兩側齒は 90 度に開き齒丘は廣く滑かなり．

殼長 46 粍，殼高 41 粍位．東北地方の特產なるも，本州，四國，九州まで廣く分布す．

ショウジョウガヒ

Spondylus regius *Linné*

（第八十三圖　第十一圖）　×1

貝殼は偏脹し略圓形を呈す．兩殼は等片なり．殼表には細かき棘狀突起を羅列する多數の放射隆起と，長き棘狀突起を羅列する大なる放射肋 6–7 を有す．該棘狀突起は背緣部小さく腹緣部大なり．殼地は美麗なる鮮紅色を呈し，棘狀突起は往々白色を帶ぶ．

殼長 70 粍位．本邦南部に產す．

チリボタン

Spondylus cruentus *Lischke*

（第八十三圖版　第十二，十三圖）　×1

貝殼は稍不規則なる圓形を呈し，長さ 70 粍，高さ 65 粍，幅 30 粍に達す．可成り扁平し，兩殼不等にして右殼は左殼よりも膨出し，多數の大なる不同の放射肋を有す．其上面に多くの花瓣狀の棘狀突起を羅列し，腹緣のもの大なり．淺き岩上に右殼にて着生生活す．美麗なる鮮赤色或は帶褐赤色なり．貝殼は常に海岸にて採集し得る極めて普通の種類なり．分布甚だ廣く，殆んど內地全般に亘りて棲息す．

Corbicula japonica *Prime*

"Yamato-sizimi"

Pl. LXXXIII, figs. 1, 2.　×1

Shell high, trigonal, compressed, rather solid, shining, smoky chestnut, wrinkled with partly obsolete grooves, striped with purple inside towards the apex, bluish at the sides and edge; anterior side much sloped, shorter, posterior side obtusely angular, obliquely truncated.

Commonly occurs in central Japan; its meat is used as food.

Corbicula sandai *Reinhardt*

"Seta-sizimi"

Pl. LXXXIII, figs. 3, 4.　×1

Shell triangular-oval, rather coarsely sculptured with narrow riblets which are rather widely spaced. Distinguished by its large, high and inflated beaks and strong teeth.

It varies from yellowish olive to black externally, violet or white inside or in some places it is yellow or olive-yellow outside, pinkish white, with salmon-tinted border within. Length 34, altitude 31, and diametre 20 mm.

The name *Corbicula sandai* is usually applied to the common *Corbicula* of Lake Biwa, which provides a well-known food-product.

This species is not known north of Lake Biwa, but has a wide distribution in the southern parts of Japan as far as Kyusyu.

Corbicula leana *Prime*

"Masizimi"

Pl. LXXXIII, figs. 5, 6.　×1

Shell triangular oval, with coarsely sculptured nymphs and coarse ribs of the exterior. Beaks moderately projecting. Cardinal teeth 3 in number, and many small lateral teeth are situated on both sides of the former.

It varies from yellow or greenish yellow in young and half-grown shells, to black in old ones, and the interior is violet. It attains a length of 44, height 39 and diametre 25 mm. This is the common and widespread species throughout all Japan except Hokkaido. Tasty as food.

Corbicula leana orthodonta *Pilsbry*

"Narihira-sizimi"

Pl. LXXXIII, figs. 7, 8.　×1

Shell somewhat triangular, upper margins sloping steeply and straight on each side of the high beaks, the basal margin evenly arcuate. The anterior end is broadly rounded, the posterior end narrower and somewhat lengthened. The glossy surface is sculptured with rather closely set ribs, slightly narrower than the intervals. In old shells the ribs are obsolete near the basal margin.

The colour is greenish-yellow with wide blackish zones, old shells being mainly black. The interior is lustreless, violet-tinted white. The hinge is rather narrow. Nymphs narrow and strongly roughened.

It attains to a length of 48, height 42.5, diametre 25.5 mm. Distributed in the central part of Japan.

Corbicula nipponensis *Pilsbry*

"Nihon-sizimi"

Pl. LXXXIII, figs. 9, 10.　×1

Shell rounded-oval, with moderately elevated beaks. This species is chiefly characterized by its wide, smoothish nymphs, distinct, smooth lunule, fine striation, and by having the lateral teeth usually not curved at the ends by the encroachment of the posterior adductor muscle. Interior violet whitish, usually with a dark violet band along the basal margin.

Length 46, height 41, diametre 25 mm. Chiefly distributed in the north-east regions but also found in southern portions towards Sikoku and Kyusyu.

Spondylus regius *Linné*

"Shozyo-gai"

Pl. LXXXIII, fig. 11　×1

Shell ovate ventricose, valves equal, radiately ribbed and ridged, ridges minutely prickly scaled, ribs armed with very long solid spines, cardinal area small; purple-rose, spine ssometimes whitish. Occurs in southern Japan; length about 70 mm.

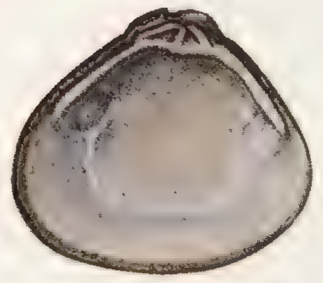
Spondylus cruentus *Lischke*

"Tiribotan"

Pl. LXXXIII, figs. 12, 13.　×1

Shell irregularly roundish, tolerably compressed. Right valve usually expanded, ornamented with distant radiating ribs which are mostly crenate or granular near the hinge-margin and foliaceous or spiny in the ventral.

Colour beautiful red or brownish, attached on shallow water rocks. Commonly occurs in Japan.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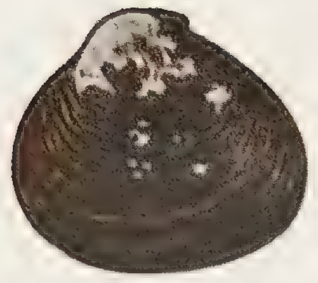
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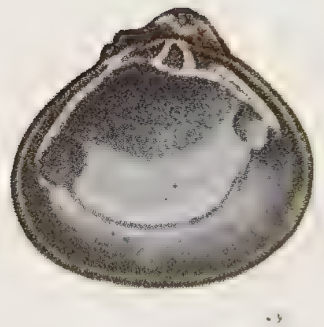
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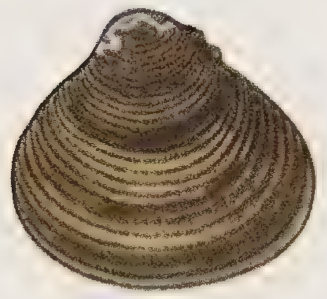
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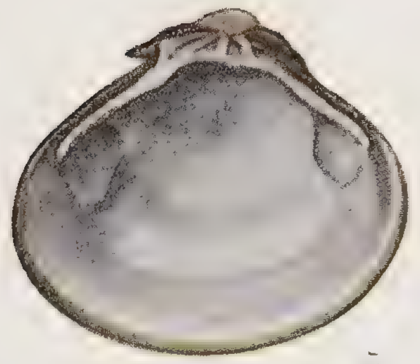
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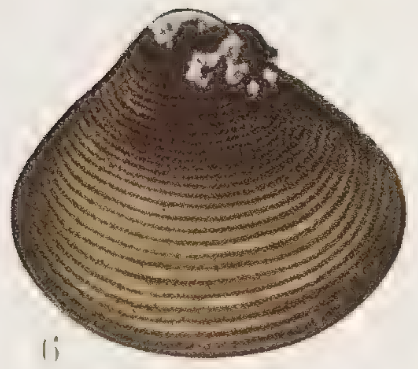
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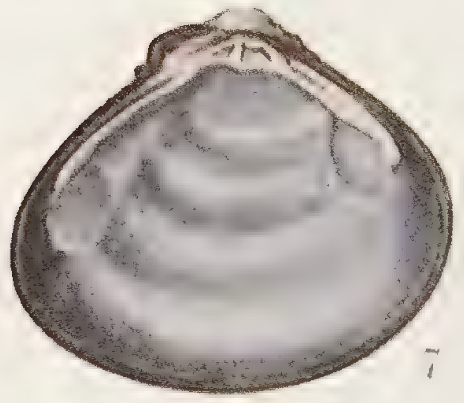
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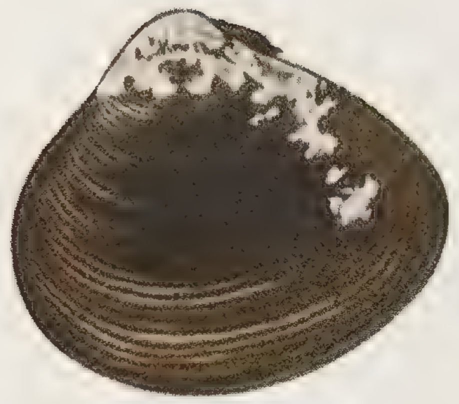
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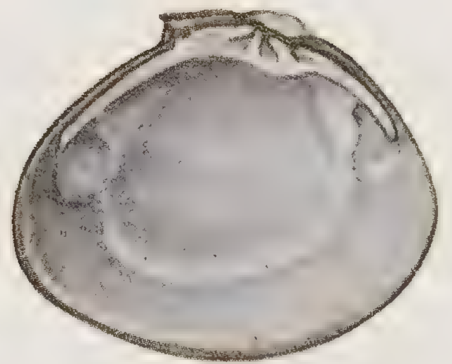
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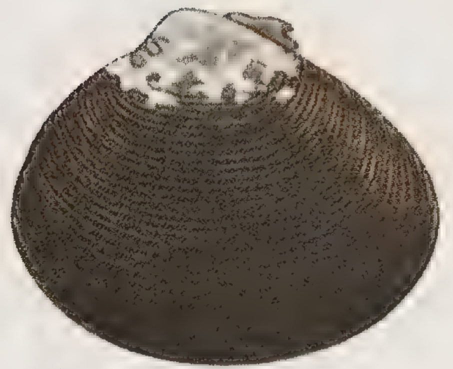
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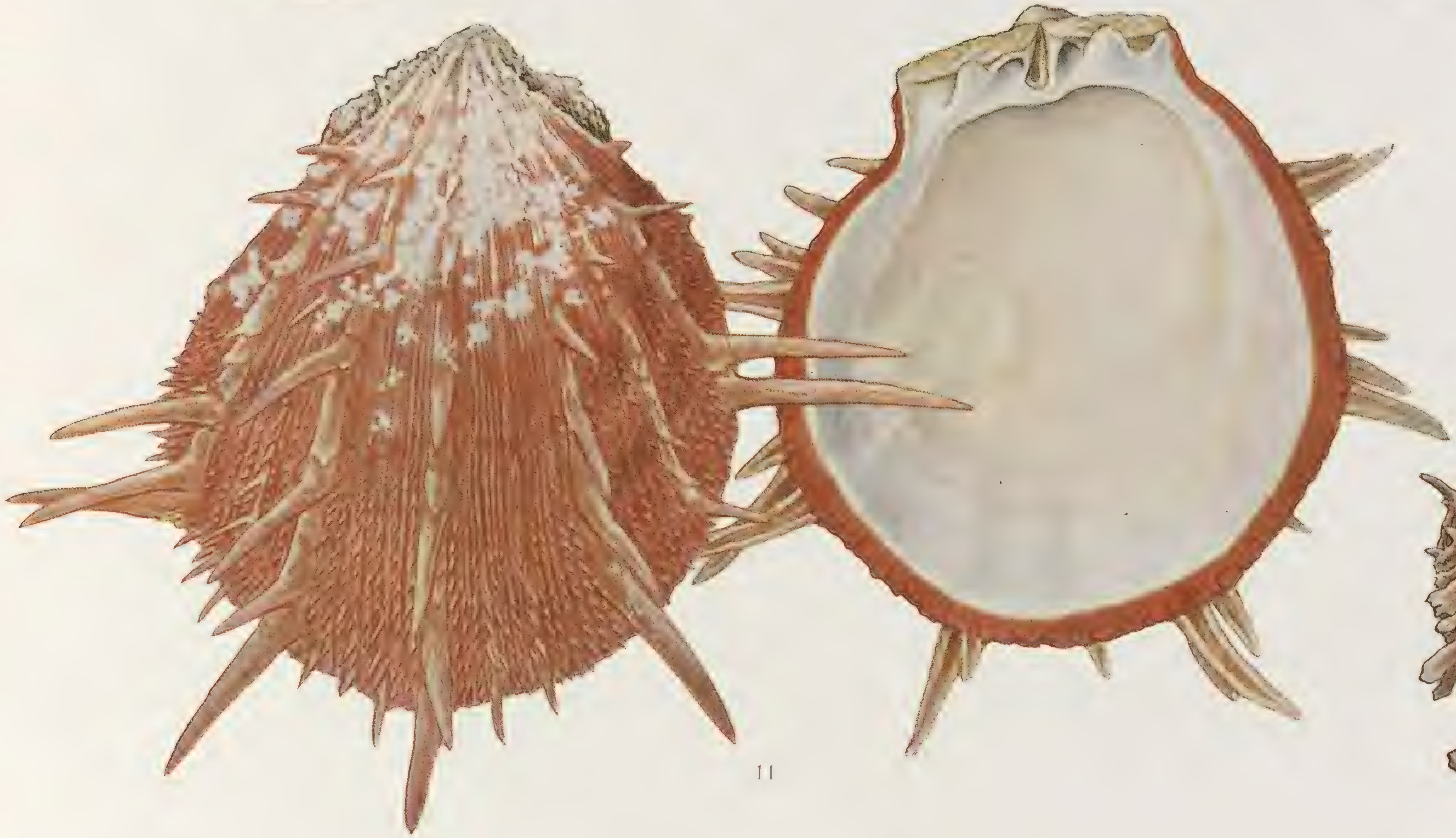
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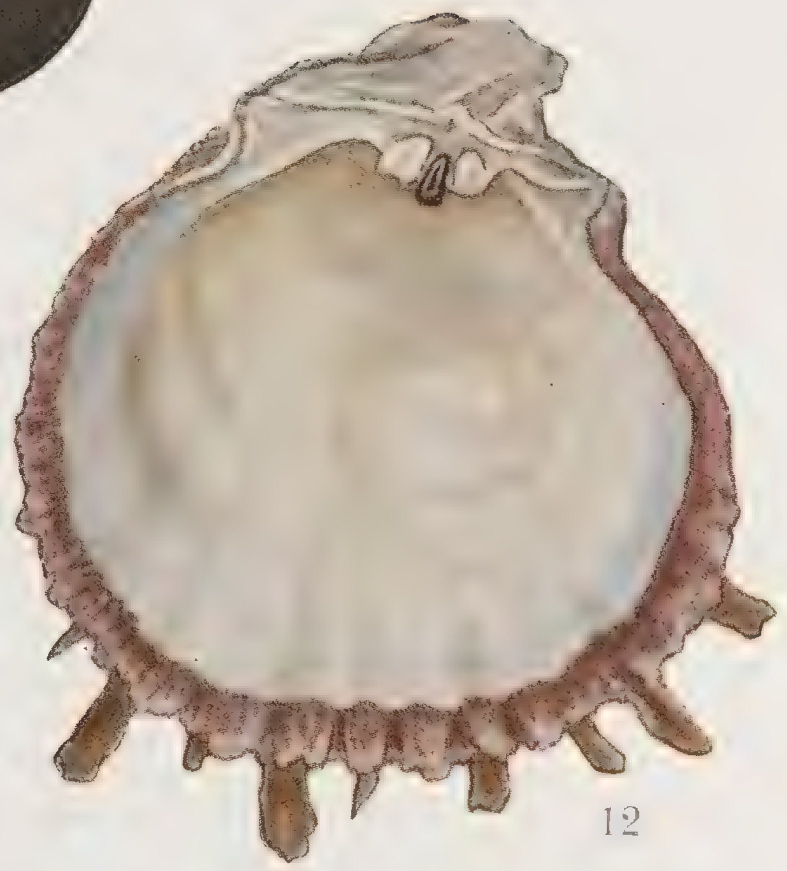
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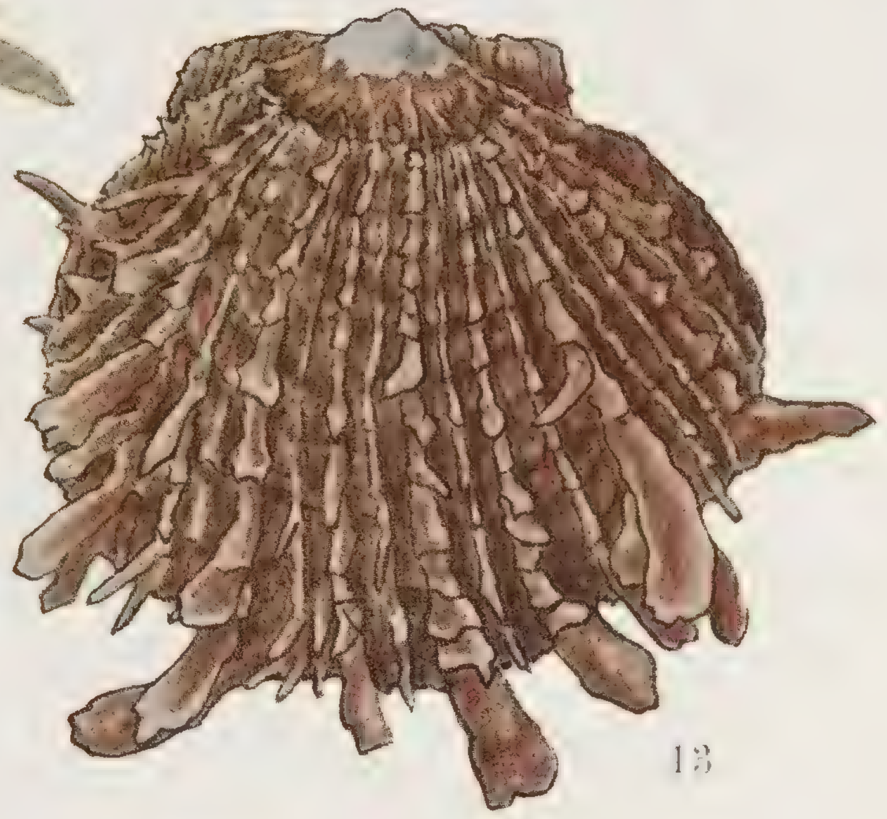
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イシガヒ

Unio donglaisiae nipponensis *v. Martens*

（第八十四圖版　第一，二圖）　×1

貝殼は强固にして長楕圓形を呈し，兩端細小となるも殊に後端の方尖る．殼の後端部に低き放射肋あるか或は殆んど發達せず．貝殼の表面は多くの輪線を有する外，波狀ある山形の凹凸ありて時に結節をなすことあり．表面は橄欖色乃至黑色の外皮を被る．長 35 粍，高 15 粍に達す．主として東北地方の清冽なる山地の河川に棲息す．

ササノハ

Canceolaria oxyrhynca (*v. Martens*)

（第八十四圖版　第三，四圖）　×1

貝殼は劍狀を呈し强固なり．後方部には明瞭にして挾出せる放射肋あり．殼の前端部は丸く，後端部は伸長し鋭角をなす．殼頂は低く凹凸ある結節あり．其結節は殼の表層にも見ゆることあり．僞主齒は左殼に 2 個存在し前方のもの稍や大なり．又右殼にも 2 個存在すれども前方のものは殆んど退化し不明瞭なり．前閉殼筋痕は明瞭にして深く，圓形を呈し恰も彫刻せるが如し．殼表は眞黑色にして光澤强し．

殼長 70 粍，高 25 粍，幅 15 粍に達し本邦中部地方の湖水及山川に產す．

タガヒ

Anodonta japonica *Clessin*

（第八十四圖版　第五圖）　×1

貝殼は薄くして楕圓形をなし左右膨大し前端部は丸く後端は稍尖鋭なり．表面には同心の輪脈を有する黑色の表皮を被り，內面は黄白色を呈す．僞主齒を缺ぎ側齒は左右兩殼に僅に痕跡として存す．

殼長 85 粍，殼高 50 粍に達す．本州及九州に廣く分布し湖沼の泥底に棲息す．

ドブガヒ

Anodonta lauta *v. Martens*

（第八十四圖版　第六圖）　×1

貝殼は稍小形にして卵圓形をなし左右膨大す．殼の後端部は僅に翼狀をなして突出す．表面は黑褐色の殼皮によりて被はる．眞珠層は美ならずして往々褐色の汚斑を存す．僞主齒を有せず，側齒は左右兩殼共退化し僅に殼のみを止むるのみ．

殼長 75 粍，高 50 粍，幅 24 粍位に成長し，本州より九州の泥深き湖沼に棲息するを以て此名ある所以なり．

イケテフガヒ

Hyriopsis schlegeli (*v. Martens*)

（第八十四圖版　第七圖）　×⅔

貝殼は大形にして稍や菱形を呈し，殼質頗る厚く殊に前端部に於て著し．而して背緣の後方には耳狀翼大なり．又殼の後部には微力なる太き放射脈を有す．殼頂は寧ろ低く．表皮は粗にして黑色の外皮を被る．蝶鉸線は前方曲り後方直線をなす．僞主齒 2 個普通完全なり．眞珠層は美麗にして紅褐紫色又は鉛白色の光彩を放つ．日本特產種にして琵琶湖の東岸各地に於て可なりの深所に棲息す．

殼長 170 粍，高 90 粍，幅 40 粍位に成長す．

カラスガヒ

Cristaria plicata spatiosa (*Clessin*)

（第八十四圖版　第八圖）　×⅔

貝殼大形にして稍薄く，前端部丸くして後端部稍や尖れり．殼頂脹れ後方の耳部殊に著大なり．蝶鉸線は規則正しく曲り，兩殼共後方に 1 條の長き側齒を具ふ．殼表は黑色の殼皮を被り又殼表上に多くの輪脈を有す．

殼長 140 粍，高 75 粍，幅 40 粍に至る．東洋の特產にして殊に本邦にては北海道より本州に亘り廣く分布す．

Unio douglasiae nipponensis *v. Martens*

"Isi-gai"

Pl. LXXXIV, figs. 1, 2.　×1

Shell solid, elliptical, biangulate, pointed behind; posterior ridge low or scarcely developed; beaks moderately full; surface of valves concentrically striate or more or less covered with corrugated chevron-shaped sculpture which often becomes somewhat nodulous; epidermis olive to blackish.

Its length is 55 mm., height, 35 mm.; inhabits the mountain rivers in north-east region of Japan.

Lanceolaria oxyrhynca (*v. Martens*)

"Sasanoha"

Pl. LXXXIV, figs. 3, 4.　×1

Shell ensiform, solid, with a distinct, pinched-up posterior ridge, rounded in front, the posterior end sharp and elongated; beaks low, their sculpture nodulous, often extending more or less over the surface; pseudocardinals rather stumpy, two on the left valve, the anterior one rather large; and also two on the right valve, but the anterior one almost indistinct.

Anterior muscle scars distinct, the upper round, very deep appearing as if bored out. Epidermis black and lustrous. It attains a length of 75, height of 25, and diametre 15 mm. Inhabits the lakes and rivers of the central part of Japan.

Anodonta japonica *Clessin*

"Tagai"

Pl. LXXXIV, fig. 5.　×1

Shell thin, elliptical, inflated, rounded anteriorly and a little acuminated posteriorly; with concentrically striated blackish epidermis, and yellowish white colour within. Without pseudocardinals, and with lateral teeth as a remnant on both the valves. It attains 85 mm. in length and 50 mm. in height. Inhabits muddy bottoms of lakes in all parts of Honsyu and Kyusyu.

Anodonta lauta *v. Martens*

"Dobugai"

Pl. LXXXIV, fig. 6.　×1

Shell rather small, oval, inflated, slightly winged in the post-dorsal region; surface covered by an epidermis of blackish brown. Nacre dull, not beautiful, sometimes with brownish patches. Pseudocardinals, none, and lateral teeth present, as long as remnant on both the valves.

It grows 110 mm. in length, 65 mm. in height and 30 mm. in diametre. Lives in the muddy bottoms of lakes in all parts from Honsyû to Kyusyu.

Hyriopsis schlegeli (*v. Martens*)

"Iketyogai"

Pl. LXXXIV, fig. 7.　×²/₃

Shell large, subrhomboid, thicker in front and strongly alate posteriorly, with slightly developed radial ridges on the posterior slope; beaks rather low; epidermis rough, blackish; hinge line curved in front, straight behind; pseudocardinals two, generally entire; nacre beautiful, lurid purplish or lead colour. Endemic in Japan. Inhabits several places on the east side of Lake Biwa in moderately deep water. It attains a length of 170, height of 90 and diametre of 40 mm.

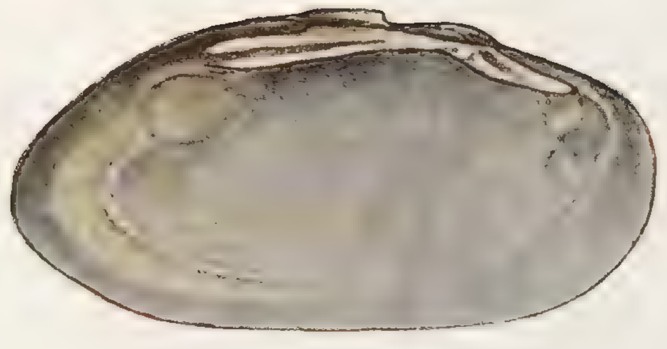
Cristaria plicata spatiosa (*Clessin*)

"Karasugai"

Pl. LXXXIV, fig. 8.　×²/₃

Shell large, rather thin, rounded in front, the posterior end a little sharpened; beaks full, strongly winged posteriorly. Hinge line regularly curved, with one lateral tooth in posterior part. Surface of shell covered with a blackish epidermis, and concentrically striate.

It attains 140 mm. in length, 75 mm. in height and 40 mm. in diametre. Widely distributed from Hokkaido to Honsyu.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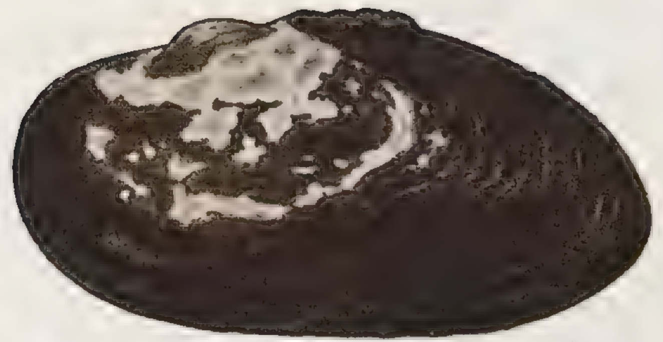
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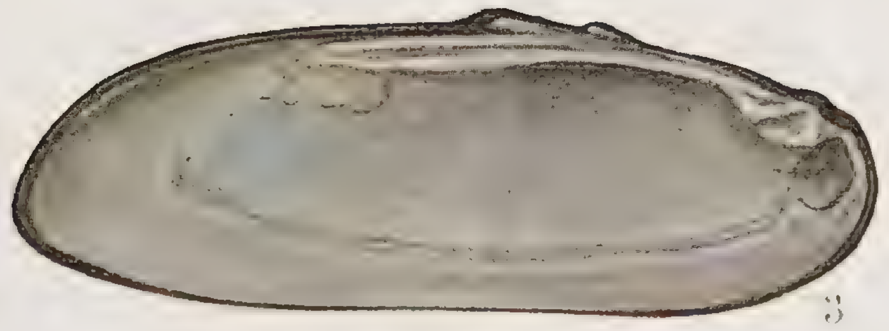
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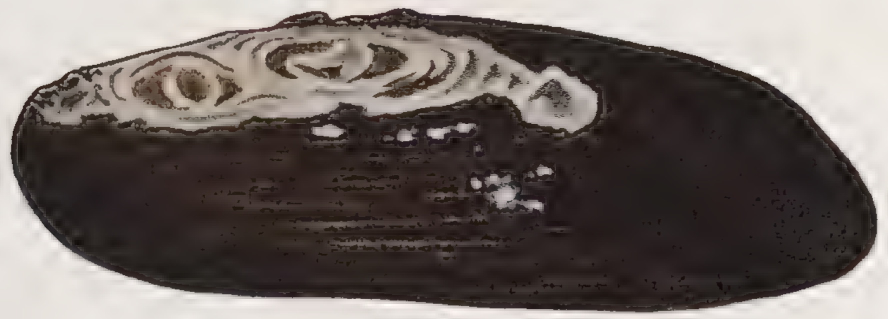
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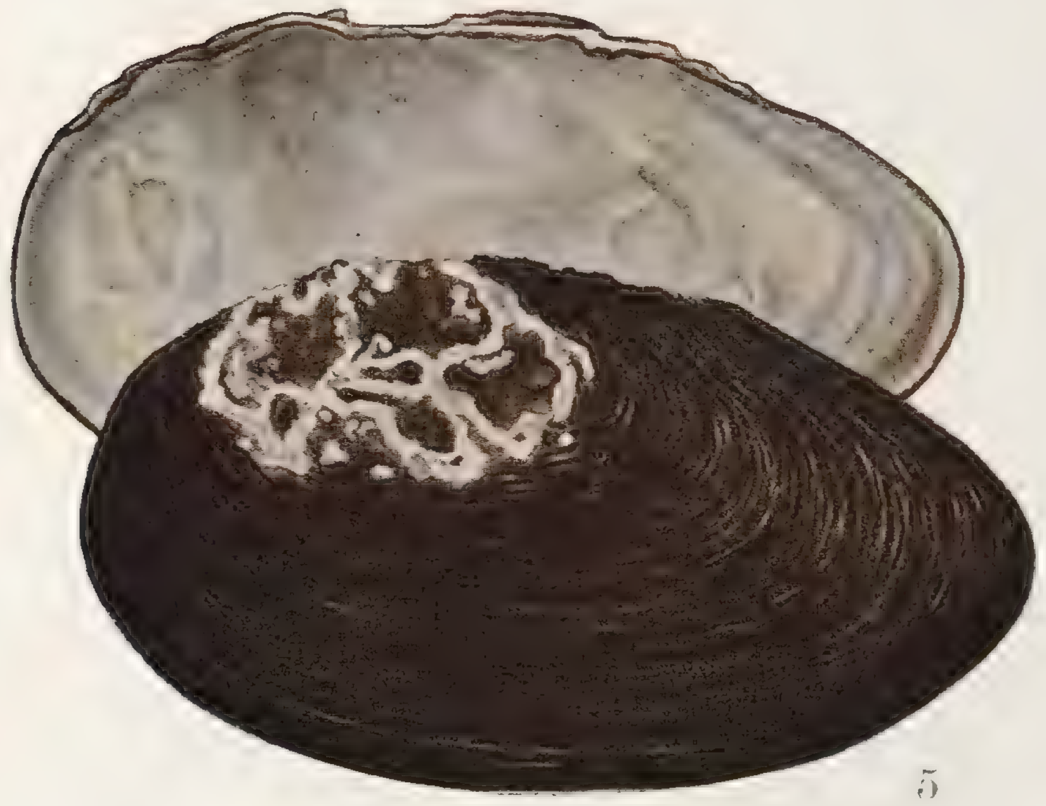
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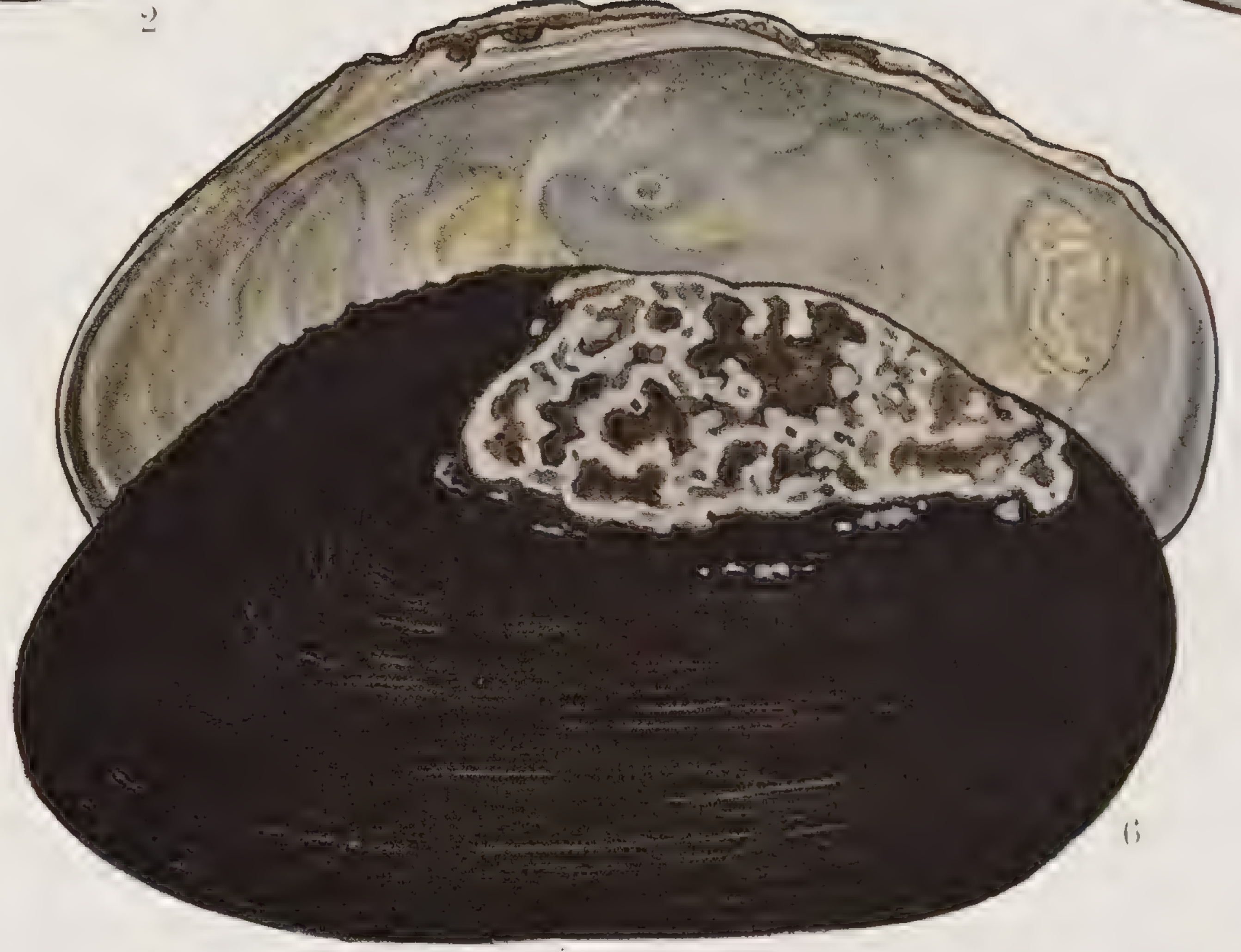
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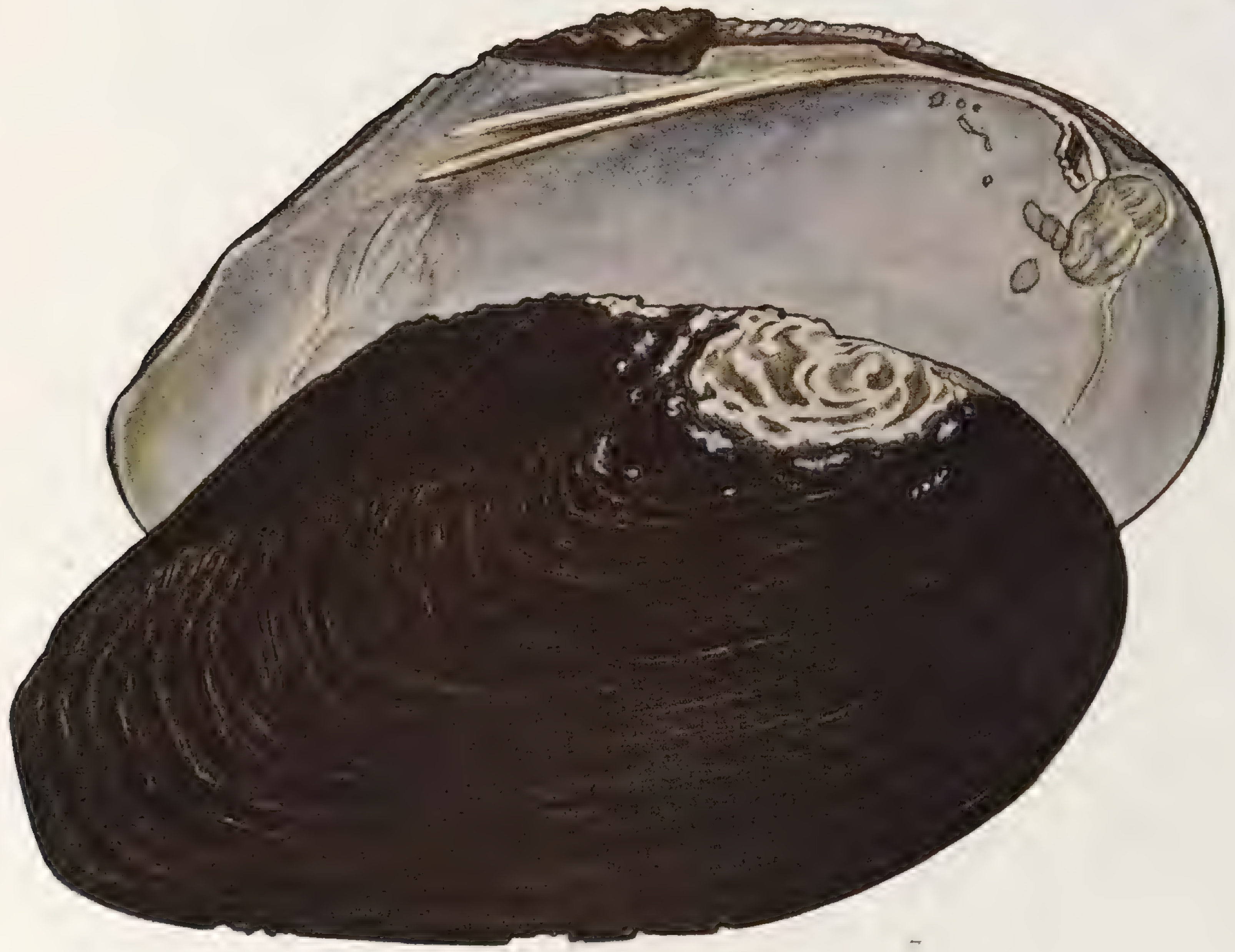
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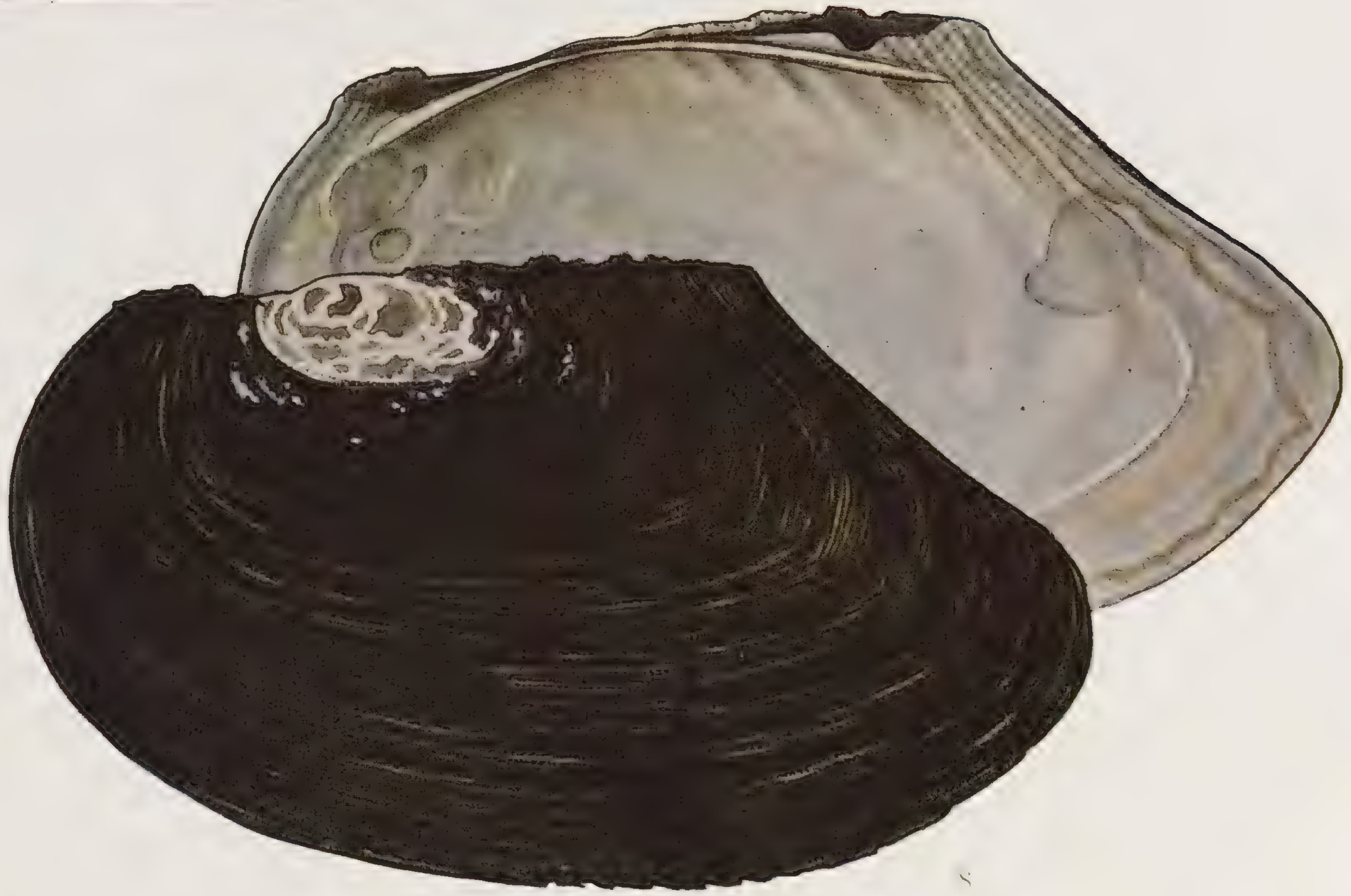
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サラガヒ

Tellina lutea venulosa *Schrenck*

（第八十五圖版　第一圖）　×1

殼質頗る厚く，殼は細長く，後端部に弱き稜を有す．外靱帶は黑色にして顯著なり．

殼長は稍後方に位し，殼表には多くの不顯著なる輪脈を有し，純白にして光澤なし．殼の內面は美麗にして中央は黃色を呈し周緣部は桃色なり．主齒は 2 個存在するも小さく，側齒も 2 個にして弱し．

殼長 115 粍內外に達し，北海道，東北地方の寒海を好み，大形のものは 3-6 米の海底の砂中に棲息す．

ベニガヒ

Tellina consanguinea *Sowerby*

（第八十五圖版　第二，三圖）　×1

細長き二枚貝にして，殼頂は中央より稍後方に位し，殼の前端部は丸く，後端部は强く突出し，且右方に曲る．右殼片の該曲部の基部に斜の凹部を生じ，左右殼片は不等なり．

殼表には微細なる輪脈多く，光澤强く，紅色にして甚だ美麗なり．殼の內面も亦紅色を呈し，外套線の彎入著大なり．殼長 54 粍內外に達す．

本州より九州に至る沿岸至る所に產す．美麗なれば種々の貝細工に使用せらる．

サクラガヒ

Tellina nitidula *Dunker*

（第八十五圖版　第四，五圖）　×1

貝殼は長楕圓形をなし，小形なり．左右等殼片をなし，殼の前端部，後端部こも丸く，稜は微なり．殼長 20 粍，殼高 12 粍，殼幅 3 粍位．

殼頂は中央より稍後方に位し，外靱帶は後丘の存在すべき背緣の一部を占む．殼表には絹絲狀の輪脈多く，光澤强く，櫻色を呈し美麗なり．

本邦東海沿岸より九州に迄產し，淺海砂泥底に棲息す．美麗なるを以て種々の貝細工に用ゐらる．

バカガヒ

Mactra sulcataria *Reeve*

（第八十五圖版　第六，七圖）　×1

貝殼稍三角形をなし，輪層細かく，殼表は淡黃褐色の地に濃褐色の放射線あり．殼長 80 粍位に達し，鹹度高く潮水の疎通よき水深 1～2 尋の淺海の砂泥地を好む．產卵期は主こして，夏季にして成熟せる雌貝は紅色，雄貝は淡黃色を呈す．

東京灣，伊勢灣，瀨戶內海は主產地にして，肉は食用に供せられ，肉柱は特に賞味され價格蛤より高し．

オホトリガヒ

Lutraria maxima *Jonas*

（第八十五圖版　第八圖）　×1

長楕圓形中形の二枚貝にして，殼長 120 粍，殼高 58 粍，殼幅 21 粍，位の大さの貝殼を有す．殼頂は小にして前方に偏し，殼の前後兩端部突出し，前端部は丸きも，後端部は稍方形を帶ぶ．殼表には多數の細かき輪脈を有し，殼の地は白色なれこ，汚黃色の薄き殼皮を有す．蝶番線は前方に太く延長し，幅廣き下垂部を有し左殼に顯著なり．主齒は右殼に 2 個平行し，左殼には平行せる 3 個の他に，上端部に顯著なる 1 個を有す．

房州，瀨戶內海等の海に產す．

シホフキ

Mactra veneriformis *Reeve*

（第八十五圖版　第九，十圖）　×1

貝殼は亞三角形をなし殊に殼頂膨大せる二枚貝なり．蝶番は唯 1 個にしてその後に內靱帶あり，側齒は右殼に 2 枚左殼に 1 枚を有し概して厚く强堅なり．表皮淡褐色にして，殼頂附近を除き稍粗き多くの輪脈を有し殼緣に近く紫色を交ゆ．

殼長 45 粍內外に達し，4-7 月の候產卵す．本州，四國，九州の淺海に產し，特に東京灣にては「ツブ」こ稱し，千葉縣の沿岸船橋，檢見川，幕張，稻毛等の地方にて盛にこの稚貝を淺所に蒔き付けて增殖す．

この貝は潮の干滿線內にありて，淺蜊の棲息する所は勿論尙それよりも陸近き場所にも棲息し，肉は食用に供せらる．

ホツキガヒ

Mactra sachalinensis *Schrenck*

姥貝，北寄貝

（第八十五圖版　第十一圖）　×1

一名「ウバガヒ」（姥貝）こ稱し，殼形は潮吹貝に酷似してその大形なるものなり．殼質厚く，殼は脹れ殼色は灰褐色をなし殼の內面は白色なり．殼表には「バカガヒ」の如き粗き輪脈を有せず，また殼頂附近より放射せる色帶なし．殼長は成長せるものにて 120 粍內外に達し，寒流の影響ありて淡水の注加少き近海の砂泥地に產し，樺太，北海道，東北の地方に多く，房州以南には之を見ず．

產卵期は六，七月にして冬期より春期に亙り採收す，肉身は生鮮の儘，或は乾製品こして食用に供し，肉柱は大形なるを以て頗る賞味さる．

アリソガヒ

Mactra spectabilis *Lischke*

（第八十五圖版　第十二圖）　×1

亞三角形の頗る大型なる二枚貝にして，殼長 112 粍，殼高 88 粍，殼幅 52 粍位の貝殼を有し，殼頂は稍尖りて前方に向ふ．殼表には殼頂附近を除きて多くの細かき輪脈を有し，汚黃色の薄皮を被る．殼頂附近は淡菫色を帶び，殼の內面は稍黃色を帶ぶ．

日本海，房州，阿波等の海に產し，肉は食用に供せらる．

ミルクヒ

Schizothaerus nuttalli (*Conrad*)

（第八十五圖版　第十三圖）　×1

殼形「バカガヒ」に似て，大形の二枚貝なり．殼質厚く稍楕圓形にして脹れ，後端部には大なる楕圓形の間隙を開く．

外皮は暗褐色にして殼の內面は白色なり．殼長 130-150 粍に達す．3-6 月を產卵期こし，東海より九州に至る間可成り廣く分布し，淡水の注入少き淺海の砂泥の上層に棲息し，砂泥上に水管を直上せしむるを以て直ちに發見せらる．此水管口緣に「ミル」の附着する事あるを以て此名あり．

主こして水管を食用こす．

Tellina lutea venulosa *Schrenck*

"Sara-gai"

Pl. LXXXV, fig. 1.　×1

The shell moderately thick, compressed, broadly triangular, with the length a little more than one and half times the height. The posterior lateral teeth are absent, while the anterior is single. Fleshy in colour.

Lives in sandy bottoms of Northern Japan.

Tellina consanguinea *Sowerby*

"Benigai"

Pl. LXXXV, figs. 2, 3.　×1

Shell elongated, attenuated, thin compressed, concentrically finely striated, equivalve, inequilateral, purplish rose, posterior side strongly flexuous, angular, narrow, rostrated, acuminated, ventral margin straight; anterior side oblong, rounded at the end, with dorsal margin straight, hinge narrow, no lateral teeth.

Shell about 50 mm. in length.

Inhabits sandy tidal shores of central and southern Japan.

Tellina nitidula *Dunker*

"Sakura-gai"

Pl. LXXXV, figs. 4, 5.　×1

The shell transversely oval, very thin, compressed with the anterior side longer than the posterior. The anterior margin is rounded, while the posterior is arcuate and at its junction with the ventral margin bluntly angulate The hinge consists of two small diverging teeth, of which the anterior in the left valve and the posterior in the right valve is bifid. The umbonal edge running from the beak to the postero-ventral angle is very obtuse.

The pallial sinus is large and deep, almost reaching to the anterior impression.

Mactra sulcataria *Reeve*

"Baka-gai"

Pl. LXXXV, figs. 6, 7.　×1

The shells rather thin, ovately triangular in shape, longer than high, somewhat equilateral and with both extremities rounded, posterior somewhat more sharply than anterior. The surface is concentrically but unequally grooved. Lunula and area hardly developed.

Inhabits shallow sandy bottoms; distribution, central and western Japan. Tasty as food.

Lutraria maxima *Jonas*

"Ôtorigai"

Pl. LXXXV, fig 8.　×1

Shell comparatively large, thin, transversely elongate-oblong, compressed; very inequilateral shell more than twice as long as high

The surface smooth, with brownish epidermis.

Mactra veneriformis *Reeve*

"Siohuki"

Pl. LXXXV, figs. 9, 10.　×1

Shell somewhat smaller, but higher and more inflated; equilateral, posterior somewhat more sharply than anterior. The surface concentrically grooved. Dusky yellow or grayish in colour, with thin epidermis; inside of shell partly purple. Occurs abundantly in central and western Japan, and its adductor muscle is used as food.

Mactra sachalinensis *Schrenck*

"Hokki-gai"

Pl. LXXXV, fig. 11.　×1

Shell large, thick, tumid, triangular anterior side shorter than posterior, rounded at both ends though generally more sharply behind than in front, ventral margin broadly curved with the anterior half sometimes less curved or even nearly straight. Surface with very unequal and irregular concentric grooves. Dark brownish in colour, with thin epidermis.

Shells about 100-120 mm. in length.

Commonly occurs in northern part of Japan; the flesh is very tasty.

Mactra spectabilis *Lischke*

"Ariso-gai"

Pl. LXXXV, fig. 12.　×1

Shell trigonal, thin; umbo rather pointed, and directed anteriorly; outer surface of shell is covered with thin epidermis of dirty yellow colour, and with very fine lines of growth, except the umbo, where it is staind with faint violet.

Widely distributed along both coasts of the Pacific Ocean and Japan Sea. Tastey as food.

Schizothaerus nuttalli (*Conrad*)

"Mirukui"

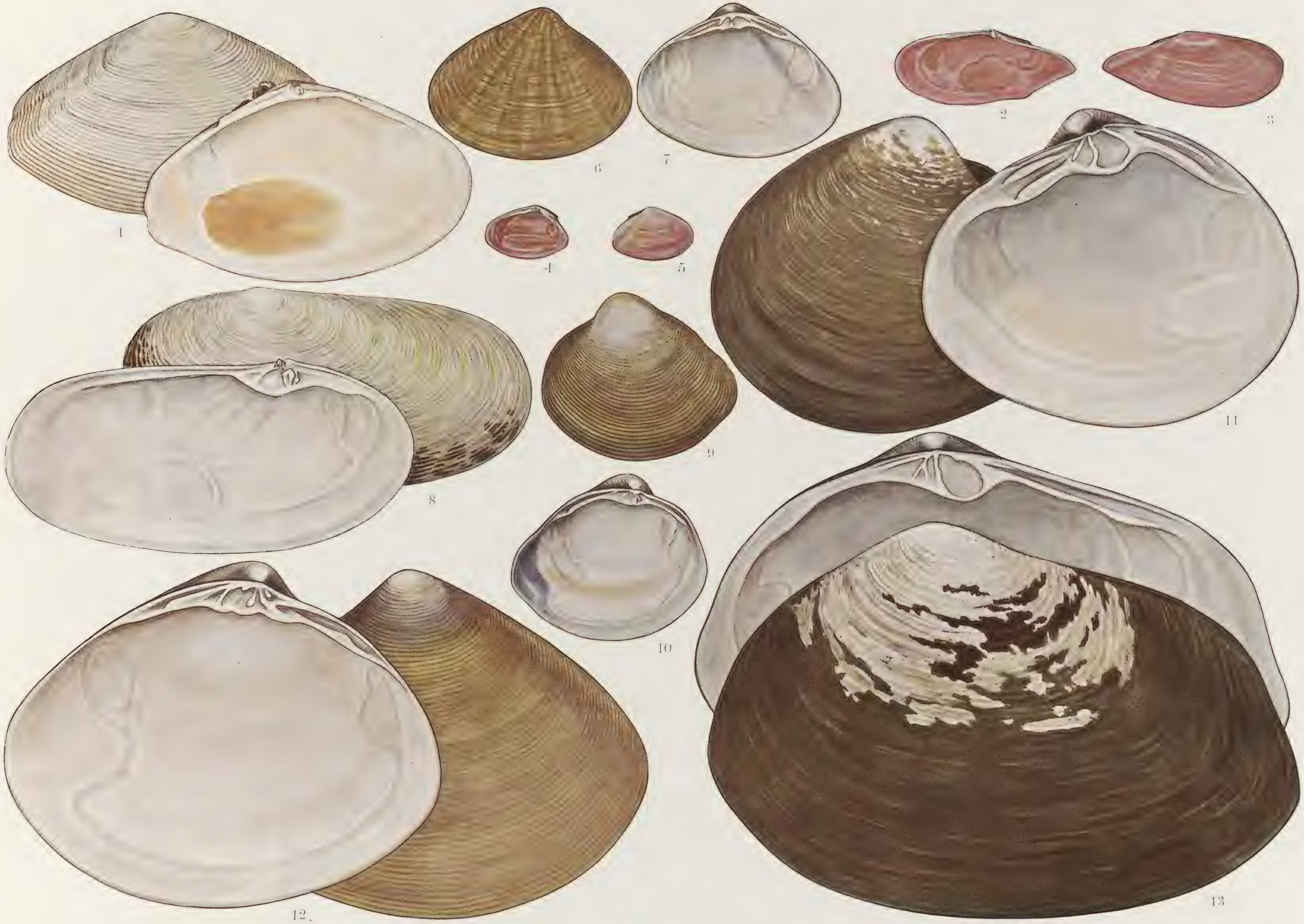
Pl. LXXXV, fig. 13.　×1

Shell comparatively large, somewhat thick, flatted anterior side shorter than posterior; posterior margin broadly rounded with the end truncate and large elliptical gaping.

Epidermis is larkish brown, inner side white. Shell measures about 130-150 mm. in length.

Distribution, central to western Japan, living in muddv bottom of Inland Sea.

第八十五圖版 PL. LXXXV



アサリ

Paphia philippinarum (*Adams & Reeve*)

（第八十六圖版　第一圖）　×1

貝殼は脹れ，稍三角形を呈し，殼頂は少しく前方に傾く．殼の後端部は前端部よりも圓味を帶び，殼表には細かき輪層多く布目狀の粗糙なる彫刻を有し，薄茶色に白斑あるを常とす．色と斑紋は千差萬別にして褐色，淡黑色，黄色乃至紅色等を呈するものあり．蝶番には主齒 3 個を具へ，殼の内面は淡黄色を帶ぶ．

殼長 40 粍内外に達す．二月の末より十一月頃まで産卵し，稚貝の養殖盛なり．全國的に分布し肉は食膳に供せられ味ひ佳良なり．

サツマアカガヒ

Paphia amabilis (*Philippi*)

（第八十六圖版　第二圖）　×1

貝殼は長橢圓形にして，殼頂は前方に位し後端部は長く延ぶ．殼表には殼頂を中心に稍粗き放射脈を有し灰白色の網目狀斑を交へ，殼の地は黄褐色なり．主齒は 3 個あり．外套痕の彎入は稍大にして殼の内面白色なり．

スダレガヒ

Paphia euglypta (*Philippi*)

（第八十六圖版　第三圖）　×1

貝殼は長橢圓形にして，殼頂は前方に在り．殼の前端部は殼頂の直下にて弱き彎入をなし，後端部は稍長く突出す．殼表には殼頂を中心とせる粗き輪層ありて輪脈間は幅廣き溝をなす．殼の地は肉褐色にして放射狀の顯著なる栗色斑を有す．蝶番には主齒 3 個を有しその頂は分岐す．殼の内面は白色，外套痕の彎入稍大なり．

殼長 90 粍位． 本州，四國，九州の海に産す．

ハマグリ

Meretrix meretrix (*Linné*)

（第八十六圖版　第四，五圖）　×1

貝殼は略三角形をなし，前端部は稍丸味を帶ぶるも後端部は稍突出大なり．殼表は平滑にして褐色或は汚白色の地に暗褐色の太き縱斑を有す．蝶番には主齒側齒各 2 個を有し，靱帶は黑色にして短きも顯著に脹る．

殼長 90 粍内外に達す．産卵は 五—九月に亘る．北海道を除くの外，全國的に分布し 1–2 米の砂泥沿岸に棲息す．肉は食用とし美味にして經濟上重要なり．

カガミガヒ

Dosinia japonica (*Reeve*)

（第八十六圖版　第六圖）　×1

貝殼は扁平，亞圓形にして其前端部は少しく突出し，殼頂は小さく前方に向ふ．殼頂を中心に細き輪脈多く，外套膜痕の彎入は鋭く小なり．主齒は白く 3 個なり．貝殼の外面は白堊色，内面亦同色なれども殊に瀨戶物樣光澤を放つ．

殼長 70 粍位，本州，四國，九州に亘り淺海の砂底に棲息す．

コタマガヒ

Gomphina melanaegis *Roemer*

（第八十六圖版　第七圖）　×1

貝殼は略等側三邊角形を呈し，腹緣は弓曲せり．蝶番線に於て一殼には 3 主齒と他殼には 2 主齒と 1 基齒を有す．殼表には輪層顯著ならずして淡褐色の地に放射狀の線紋を有す．

殼長 45 粍内外に達し，分布廣し．

オキシジミ

Cyclina sinensis (*Gmelin*)

（第八十六圖版　第八圖）　×1

貝殼は圓方形にして殼頂は稍小さく前方に向ふ．殼頂を中心として細かき顯著なる輪層多く，不顯著なる放射線によりて布目樣の彫刻細やかに，表面は黄褐色の表皮を被り，周緣は淡紫色を彩る．蝶番には右殼に 3 主齒と左殼に 2 主齒有り．殼の内面は白く，周緣には細齒を刻す．

殼長 50 粍位．本邦中部及南部に廣く産す．

ワスレガヒ

Sunnettina menstraulis (*Menke*)

（第八十六圖版　第九圖）　×1

貝殼は厚く扁平にして，前端稍尖り後端部は圓し．殼頂は小さく前方に向ふ．殼の後丘部は殊に深き溝をなしその基底部に黑色の靱帶あり．殼表には彫刻なく，平滑にして，淡紫色の地に紫色の數帶と花形の細紫線とを有し，稍厚き表皮を被る．殼の内面は白色にして兩肉柱痕と外套痕部に紫色を彩る．主齒は 3 個なり．殼の周緣には細齒を有す．

殼長 60 粍位． 房州，相州及瀨戶内海に産す．

イソシジミ

Sanguinalaria olivacea (*Jay*)

（第八十六圖版　第十圖）　×1

貝殼は長橢圓形にして甚だ扁平なり．蝶番には主齒 2 個を有す．外套線の彎入甚だ大にして殼の内面は紫色を帶ぶ．殼表は淡栗色の殼皮を被り光澤を有す．

殼長 50–60 粍位． 本邦中部及南部の海に廣く産す．

マツヤマワスレ

Macrocallista pacifica (*Dillwyn*)

（第八十六圖版　第十一圖）　×1

貝殼は略三角形を呈し，周邊は平滑にして齒狀をなさず．蝶鉸線の部位は強厚となり主齒 3 個あり．殼頂小さく，貝の兩端丸味を帶ぶるも，其後端は前端に比し稍尖る．外套膜の彎入は寧ろ小なり．貝殼の表面は平滑にして黄色の地に同心圓の紫色輪あり．更に殼頂より放射し腹緣に至り廣くなれる同色線を交叉して美麗なり．内面は鈍白色を呈す．

殼長 50 乃至 60 粍に達し，本邦中部及南部の淺海の砂底に棲息す．

Paphia philippinarum (*Adams & Reeve*)

"Asari"

Pl. LXXXVI, fig. 1.　×1

Shell oblong ovate, gibbous, very inequilateral anterior very short, truncated, radiately ridged, ridges posteriorly angled, crisply decussated at the sides.

Commonly inhabits and cultured on shallow sandy bottoms at inner bays; one of the economically important shells of Japan.

Paphia amabilis (*Philippi*)

"Satuma-akagai"

Pl. LXXXVI, fig. 2.　×1

Shell ovately oblong, rose fawn-colour, or flesh-colour, obscurely, reticulately waved with grey lines, concentrically ridged, ridges rather broad, obtuse.

Distributed throughout central and southern Japan; tasty as food.

Paphia euglypta (*Philippi*)

"Sudare-gai"

Pl. LXXXVI, fig. 3.　×1

Shell ovately oblong, slightly inflated, concentrically ridged, ridges rough, with a broad groove between ridges. Umbo situated anteriorly, a faint notch under its anterior side, the posterior part of shell elongatedly produced.

External colour flesh fawn, with radiated chestnut patches, interior white, pallial sinus rather large. Cardinal teeth three on the hinge line. It attains to 90 mm. in length; widely distributed from Honsyu to Kyusyu.

Meretrix meretrix (*Linné*)

"Hamaguri"

Pl. LXXXVI, figs. 4, 5.　×1

Shell ovato-subtriangular, thick, smooth; margins of valves simple, entire. Hinge thickened, tridentate, the anterior lateral tooth contiguous, beneath the lunule, the hinder lateral teeth crenulated. Pallial line posteriorly slightly sinuated.

Inhabits sandy shallow waters along most Japanese coasts; one of the most useful edible shells in Japan.

Dosinia japonica (*Reeve*)

"Kagami-gai"

Pl. LXXXVI, fig. 6.　×1

Shell flat, subcircular, inflated, anterior end slightly produced. Umbo comparatively small, many small concentric striations on the surface. A sinus of pallial impression small and acute, cardinal teeth three, with white colour. Colour of shell chalky white, especially interior side with porcelain luster.

It grows to 70 mm. in length. Inhabits sandy bottoms of shallow water throughout the southern parts of Japan.

Gomphina melanaegis *Roemer*

"Kotama-gai"

Pl. LXXXVI, fig. 7.　×1

Shell subtriangular, subequilateral, slopes nearly straight, ventral edge arcated. Hinge with three approximate cardinal teeth in one valve, two teeth and rudimentary one in the other; no lateral teeth.

Inhabits shallow sandy bottoms in central and southern Japan; its meat is used as food.

Cyclina sinensis (*Gmelin*)

"Okisizimi"

Pl. LXXXVI, fig. 8.　×1

Shell circular, thin, inflated, inequilateral, transversely striated, and with no lunular area; beaks small, approximated, margins of valve crenulated. The hinge wide flat, tri-dentate in right valve, and bi-dentate in the left valve; the ligament is external and prominent. Muscular impression posterior, remote from the cardinal margin; sinus of pallial impression triangular, often ascending.

Commonly occurs in shallow sandy bottoms of central and southern Japan.

Sunettina menstraulis (*Menke*)

"Wasuregai"

Pl. LXXXVI, fig. 9.　×1

The form of shell is roundly oval, in adult, compressed and rounded at both ends, the anterior more sharply than the posterior; while the young form is more oblong and elliptical in shape, with posterior end mostly truncate. Marginal end of this shell is denticulate. Colour of shell purplish.

Occurs on sandy shallow waters of open sea; tasty as food.

Sanguinolaria olivacea (*Jay*)

"Isosizimi"

Pl. LXXXVI, fig. 10.　×1

Shell thin, oval shape; right valve is almost flat, while the left is somewhat convex. The hinge has two cardinal teeth. The pallial sinus is very large. Surface smooth with brownish epidermis; inner side purplish in colour.

Shell measures about 50–60 mm. in length. Inhabits muddy shallow bottoms of Inland Sea; distribution, northern to southern Japan. Used as food for local people.

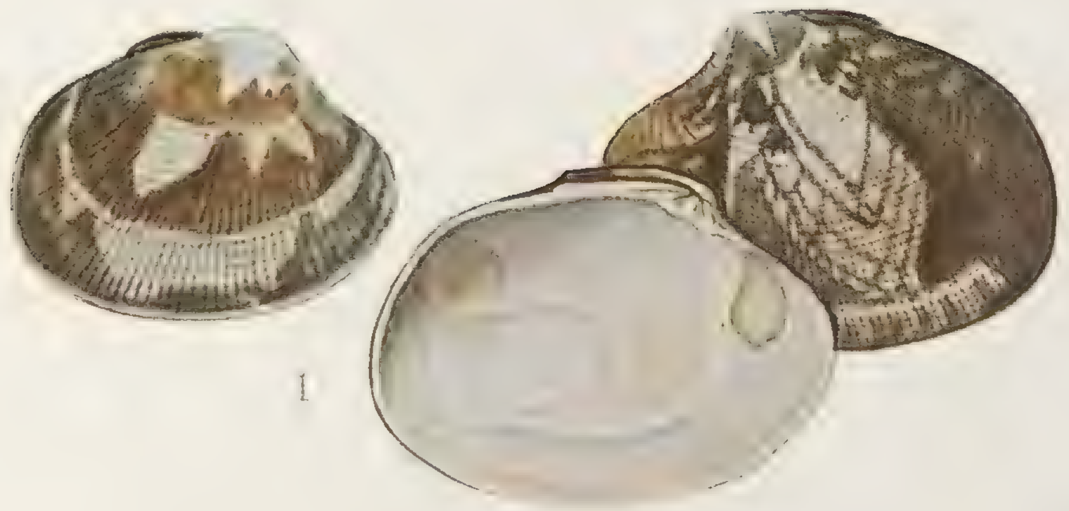
Macrocallista pacifica (*Dillwyn*)

"Matuyamawasure"

Pl. LXXXVI, fig. 11.　×1

Shell ovato-subtriangular, margins of valves simple, entire. Hinge thickened with three main teeth. Beaks small, margins of both ends compressed and rounded, the posterior more sharply than the anterior. The pallial sinus is rather small. Surface of shell smooth, concentric purplish bands on the yellow ground colour crossed with radiated purplish lines; interior dull white.

Shell measures 50–60 mm. in length; inhabits sandy bottoms of shallow seas. Distribution throughout central and southern Japan.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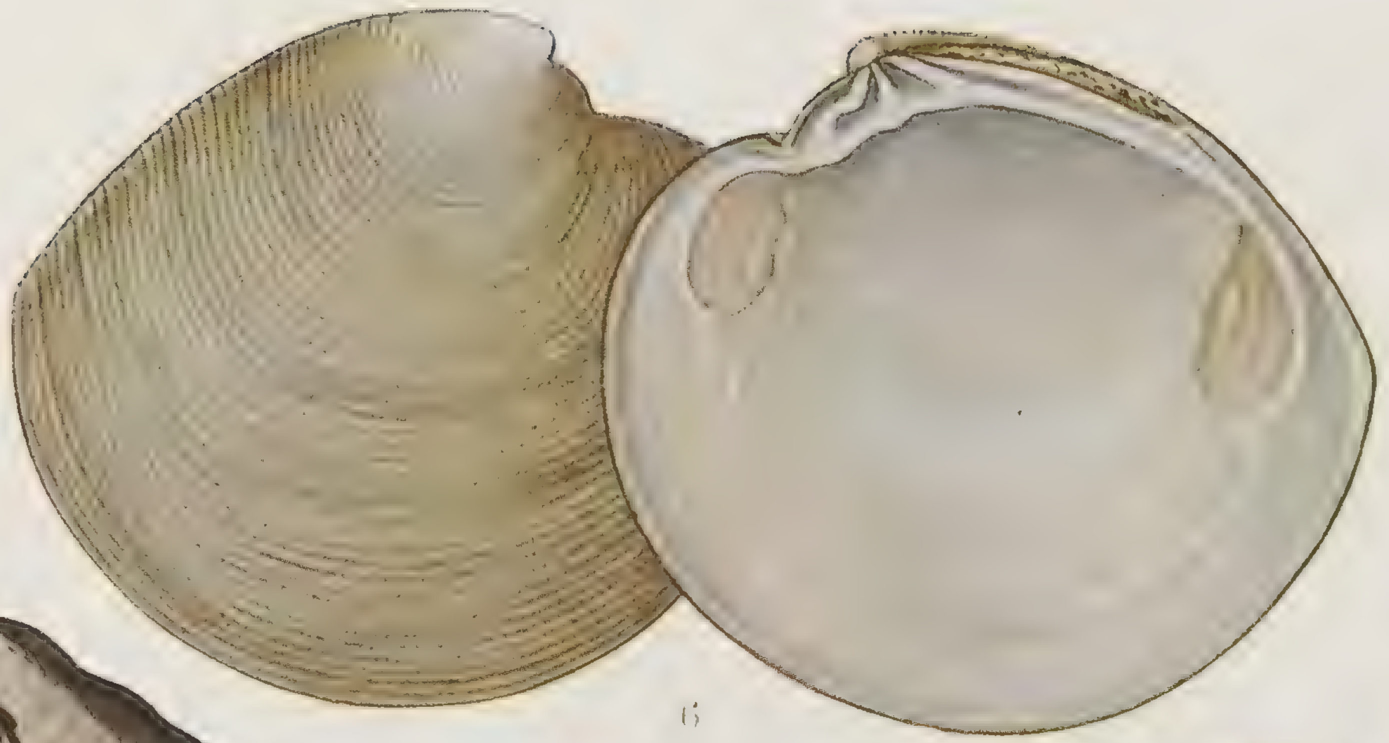
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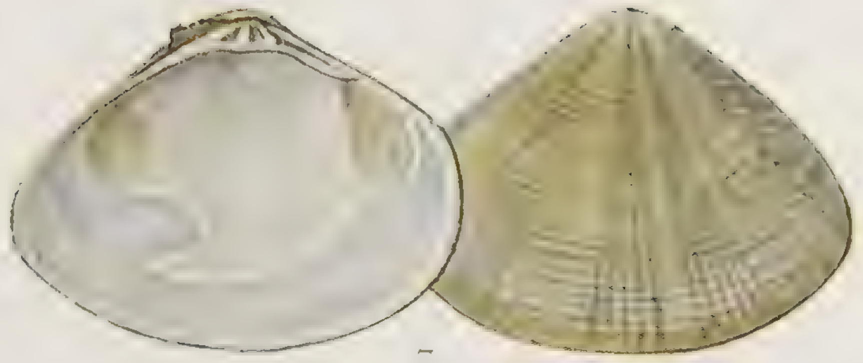
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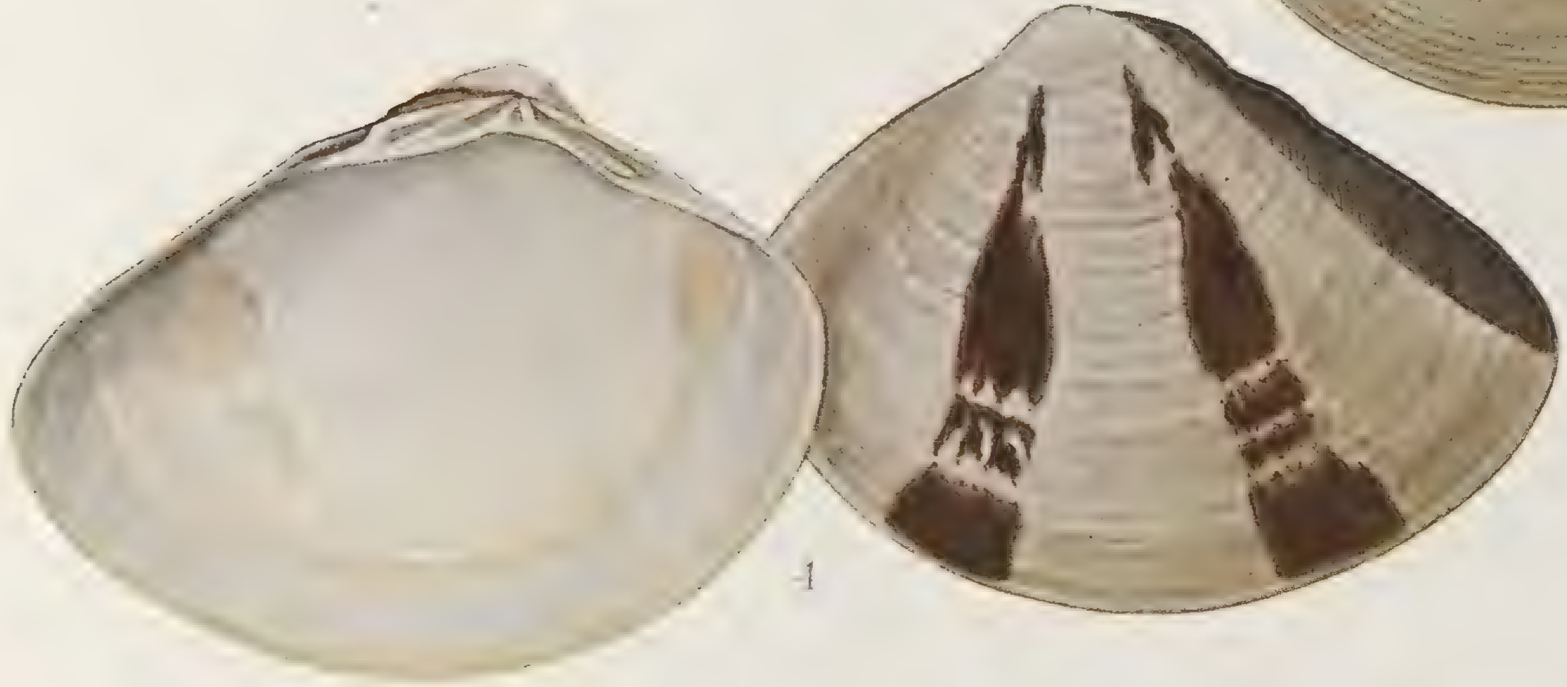
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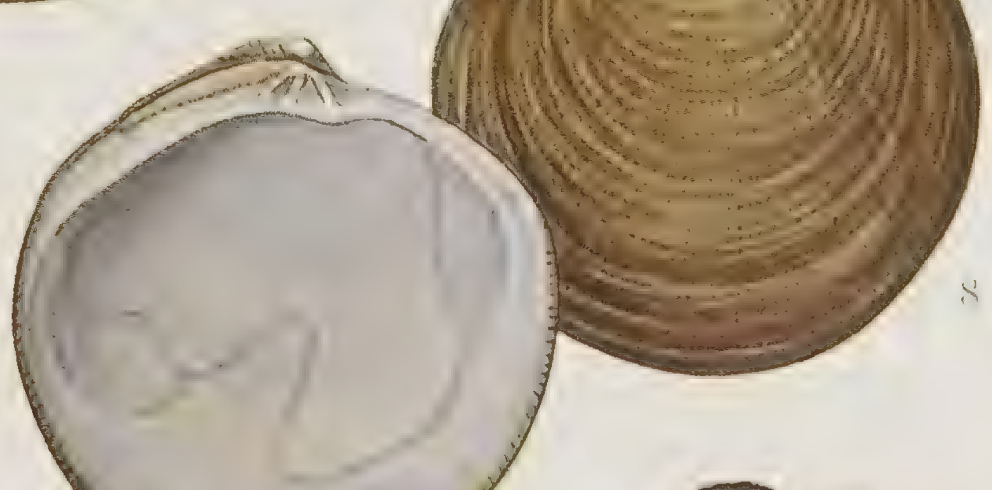
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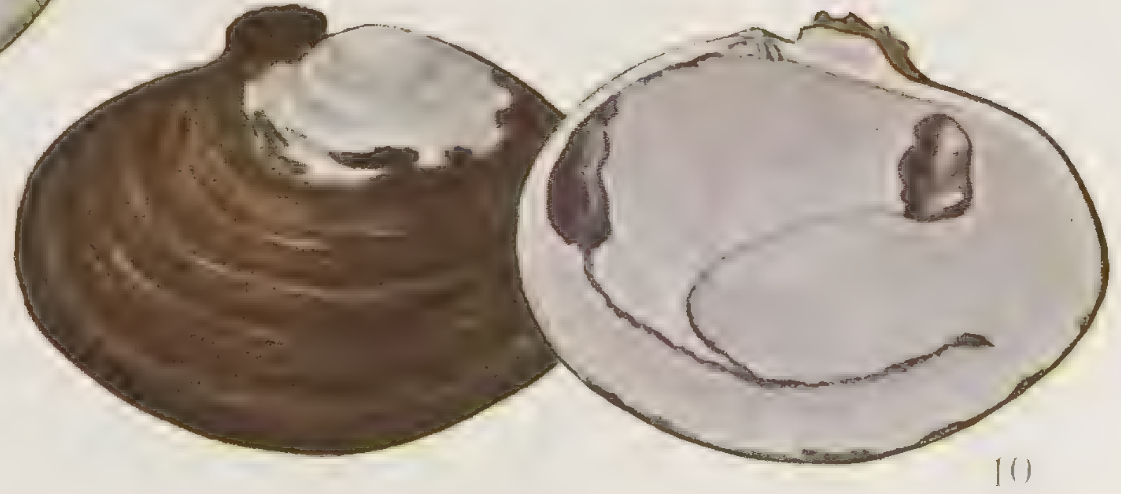
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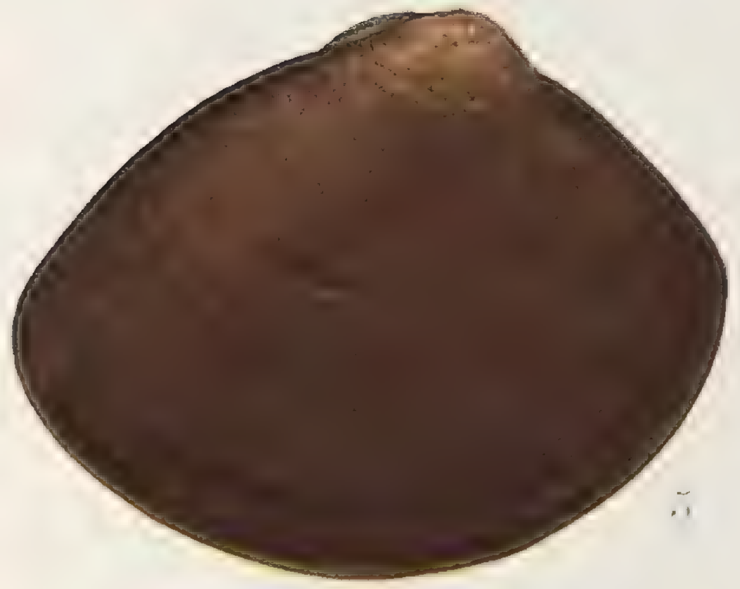
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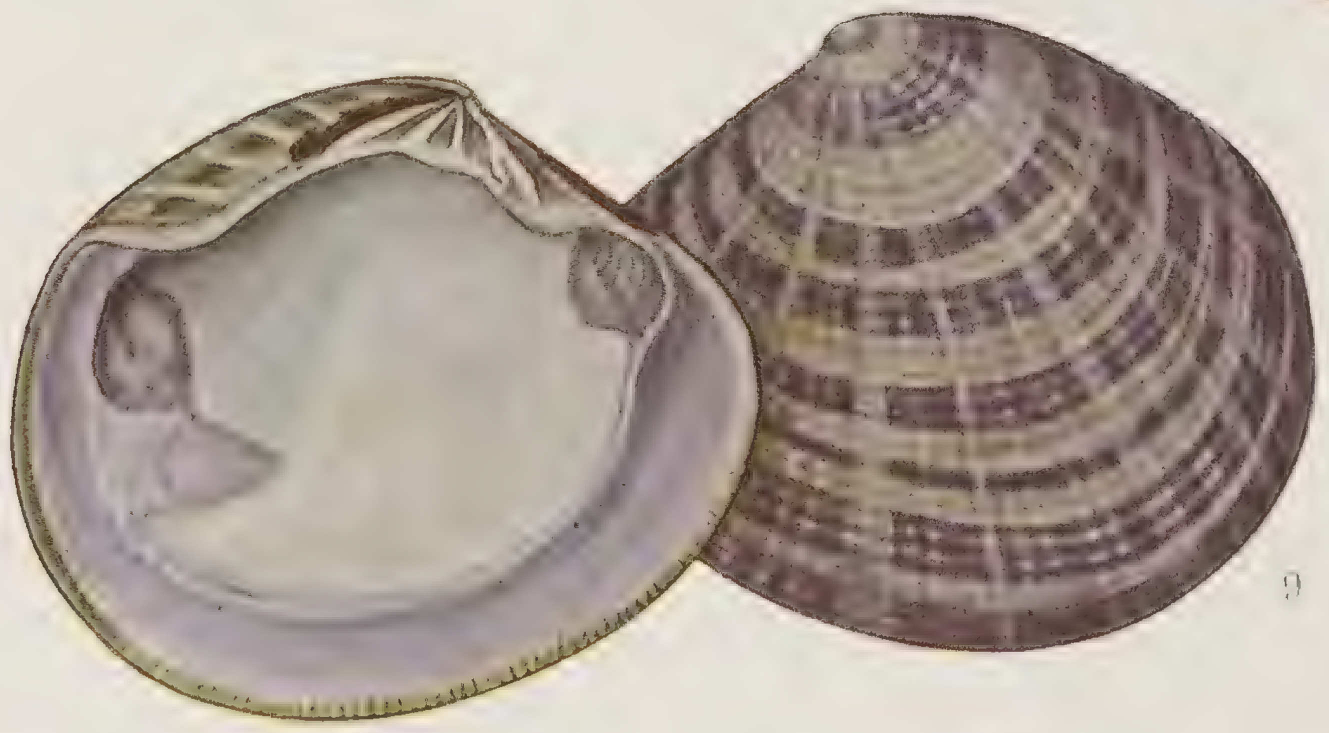
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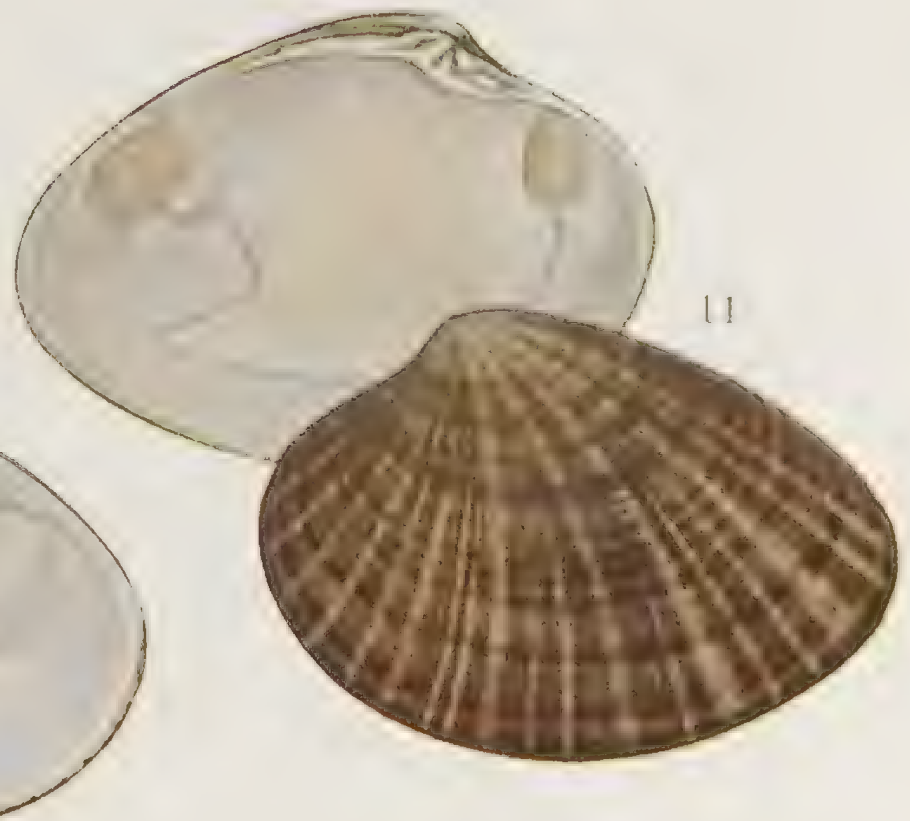
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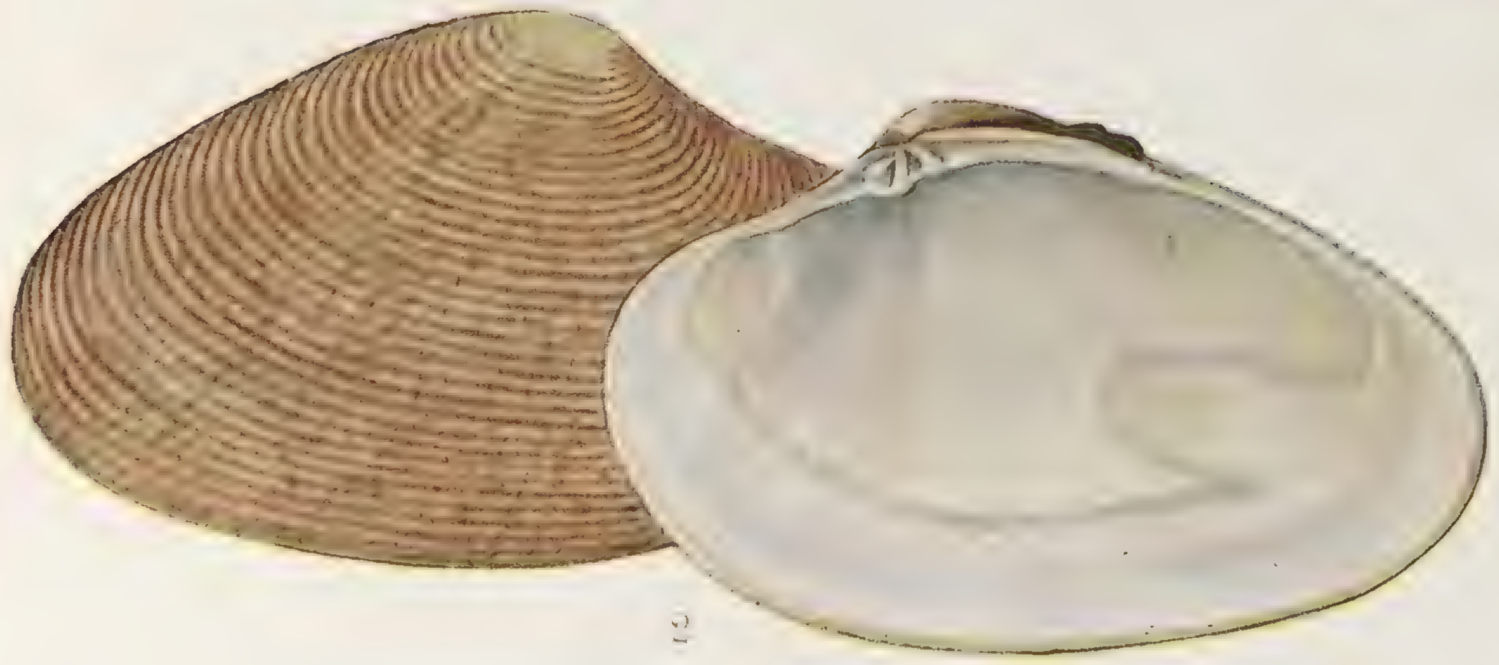
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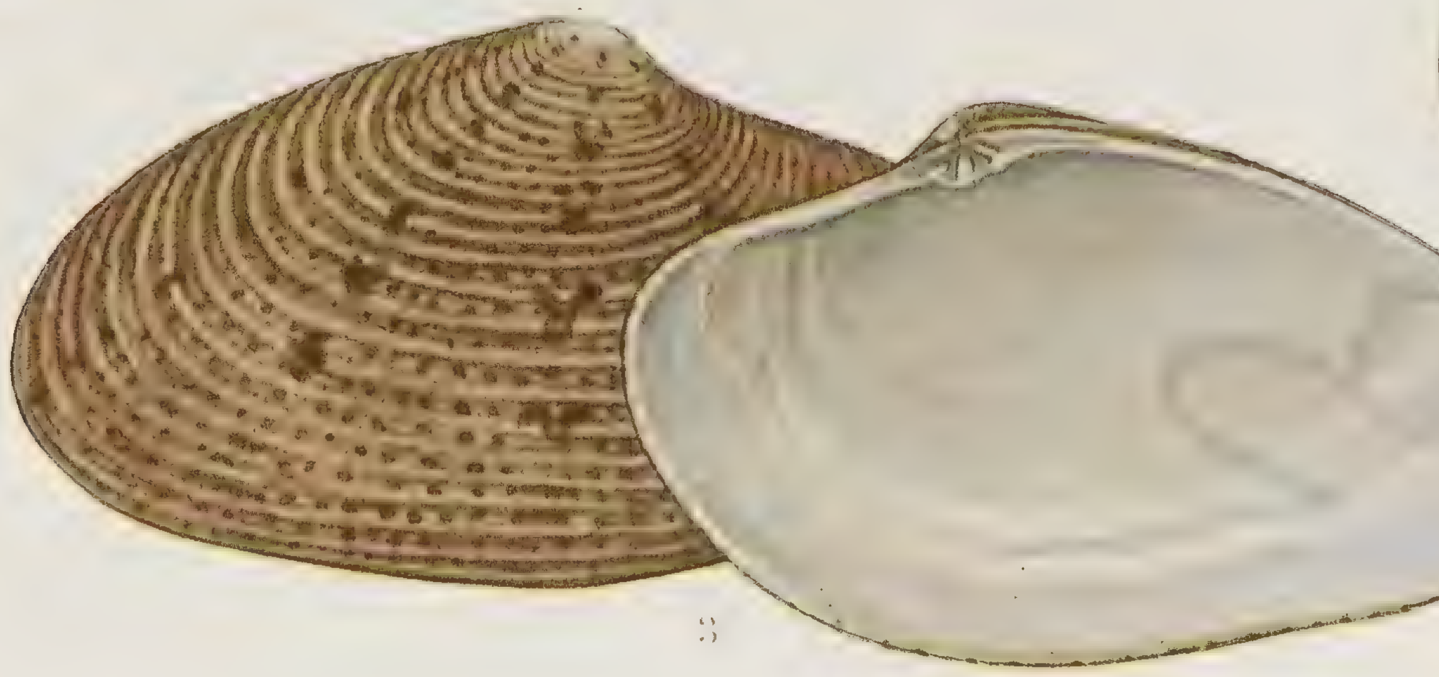
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サツマアサリ

Venus lamellaris *Schumacher*

（第八十七圖版　第一圖）　×1

貝殼は亞三角形を呈し，强厚にして緣邊に微かなる齒を列生す．殼頂は稍大，前方に偏在す．殼頂の前方下部に小なる切れ込みあり．從て貝の前端部の上方突出し翼狀を呈す．表面は白色又は黄色にして殼頂より放射せる稍や濃黄色の數條あり．又至る所粗き格子形の模様を刻す．

殼長 40–50 粍に達し，本邦南部の沿岸，暖流の洗ふ場所に棲息す．

ザルガヒ

Cardium burchardi *Dunker*

（第八十七圖版　第二圖）　×1

貝殼は圓扇形を呈し，殼の前端部は丸きも後端部は斜行す．殼頂は脹れ，先端は內方に向ふ．殼表には約 40 條の丸味を帶びたる放射線を有し，肋間狹く，殼の後方部に近き 7–8 條は稍細く小棘狀突起を有す．殼の表面は淡褐色に淡紅色の雲斑あり．主齒は兩殼共 1 個，側齒 1 對を有す．殼の內面は白色にして，殼緣には鋸齒刻目あり．

殼長 70 粍位．房州淡路等の淺海砂地に棲息し肉は食用に供せらる．

トリガヒ

Cardium muticum *Reeve*

（第八十七圖版　第三圖）　×1

貝殼は略圓形をなし脹れ，長さと高さ略相等しく，殼には鱗片ある放射肋約 46–47 條を有す．殼頂は多く滑かにして微紅を帶ぶ．殼色は帶黄白色，殼の內面は肉紅色を帶び殊に緣邊は濃紅色を呈す．蝶番には主齒 1 個と前後 2 個の側齒を具ふ．

殼長 90 粍內外に達し，各地に産す．特に瀬戸內海，伊勢海に多く，深さ 6–9 米の砂泥地を好みて棲息し，五―十月頃產卵す．肉は美味にして食用に供せられ殊に肉柱は賞味せらる．

ナガザルガヒ

Cardium elongatum *Bruguière*

（第八十七圖版　第四圖）　×1

殼は後部丸く膨れたるが如き觀をなし，殼頂高く前後兩丘顯著なり．殼表は淡黄褐色にして脹れ，放射線は角材の如く隆起し肋間は深き溝をなす．蝶番は堅固にして主齒は大なり．殼の內面白く，窩心部は稍黄色を帶ぶ．殼緣の鋸齒刻目顯著なり．

殼長 90 粍位．本邦南部太平洋沿岸に面したる暖海に產す．

ヌノメガヒ

Venus puerpera *Linné*

（第八十七圖版　第五圖）　×1

貝殼は圓形をなし，殼質厚く，周緣に細齒を刻す．蝶鉸線厚くして 3 齒あり．外套膜痕の彎入は寧ろ小．輪肋は葉狀の隆起をなし，放射脈と交りて美麗なる布目狀を呈す．殼表は白色に褐色を彩る．內面は白く，後肉柱痕部に鮮紫色點あり．

殼長 60 粍位．本邦南部に產す．

アラヌノメガヒ

Venus reticulata *Linné*

（第八十七圖版　第六圖）　×1

貝殼は略圓形を呈し，殼の前端部は丸く，後端部は下方に突出す．殼頂は丸くして高く內曲せり．殼表には殼頂を中心とし粗き輪肋多く該脈は多くの細縱脈と交りて粗き布目狀をなす．殼の表面は灰白色にして所々に褐色點を有す．蝶番部は朱色を呈し主齒 3 個あり．殼の內面は淡きクリーム色にして，外套痕彎入は卵形を呈す．

殼長 70 粍內外に達し，本邦南部暖海に產す．

ウチムラサキ

Saxidomus purpuratus (*Sowerby*)

（第八十七圖版　第七圖）　×1

殼質厚く其の形亞三角形にして稍丸味を帶ぶ．殼の前端部は稍丸く突出し後端部に小間隙を開く．殼頂は丸く左右相接し，韌帶は太くして短く黑色にして顯著なり．殼表は帶黄汚白色にして，殼頂を中心に粗き輪肋多く，殼の內面は暗紫色を呈し，肉柱痕及び外套痕明瞭なり．

殼長 90 粍內外に達し，本州，四國，九州の海に廣く分布し，肉は食用に供せらる．

Venus lamellaris *Schumacher*

"Satuma-asari"

Pl. LXXXVII, fig. 1.　×1

Shell subtriangular, thick; margins of valves faintly denticulated, inequilateral, beaks rather large, a small notch under its anterior side, posterior margin slightly winged at the upper part. Surface of shell white or yellow, with radiated yellow bands; closely crenately reticulated.

It attains to 40–50 mm. in length. Lives in the warm current of southern coast of Japan.

Cardium burchardi *Dunker*

"Zarugai"

Pl. LXXXVII, fig. 2.　×1

The shell somewhat obliquely ovate, higher than long, moderately convex and ornamented with straight, rounded, radiating ribs separated from one another by deep narrow grooves numbering a little over forty. The ribs found near the extreme end of the flattened posterior surface are accompanied by fine riblets which are roughly crenate, or even spiny, toward their lower ends.

Shell measures about 70 mm. in length.

Distributed throughout central and southern Japan, inhabiting sandy bottoms.

Cardium (Papyridea) muticum *Reeve*

"Torigai"

Pl. LXXXVII, fig. 3.　×1

The shell is rounded, but thin and fragile, suborbicular and subequilateral, ornamented with numerous radiating riblets which are flat and hardly elevated above the surface of the shell except at the sides where they are more or less ridge-like. Their number is 45–47, each subdivided into two by a fine impressed punctuated line.

Surface, yellowish white in colour, reddish inner-side of shell.

Commonly inhabits shallow muddy bottoms, its meat is tasty as food.

Cardium elongatum *Bruguière*

"Nagazaru-gai"

Pl. LXXXVII, fig. 4.　×1

Shell elongately ovate, posterior side somewhat square, serrated, radiately ribbed, ribs forty-three in number, flattened, very close set, the anterior very finely crenulated, whitish ornamented with a few scattered large yellowish spots; ribs, the posterior especially, stained with brown towards the margins.

Venus puerpera *Linné*

"Nunome-gai"

Pl. LXXXVII, fig. 5.　×1

Shell circular, thick; marginal end denticulate. Hinge thickened, tridentate, pallial sinus rather small. External surface whitish brown, with closely crenately reticulation. Internal side dull white, with purple patches under the posterior impression.

It attains to 60 mm. in length. Inhabits shallow sandy bottoms in southern Japan.

Venus reticulata *Linné*

"Aranunome-gai"

Pl. LXXXVII, fig. 6.　×1

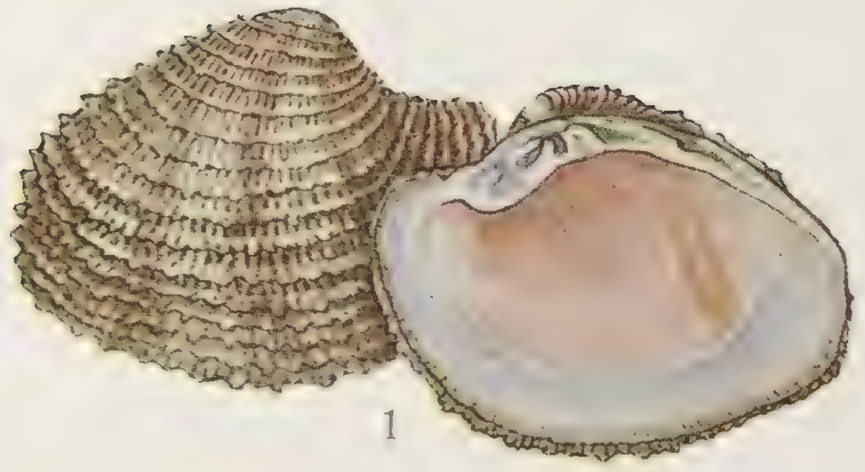
Shell squarely ovate, rather oblong, white or brownish, spotted and linearly waved with red-brown, everywhere closely crenately reticulated, posterior side slightly winged at the upper part.

Saxidomus purpuratus (*Sowerby*)

"Utimurasaki"

Pl. LXXXVII, fig. 7.　×1

This is a very common shell in northern to southern Japan. It is large, transversely oval, thick swollen deeply purple within in the living specimens. The muscular and mantle impressions are deep and distinct, with the pallial sinus deep and finger like.



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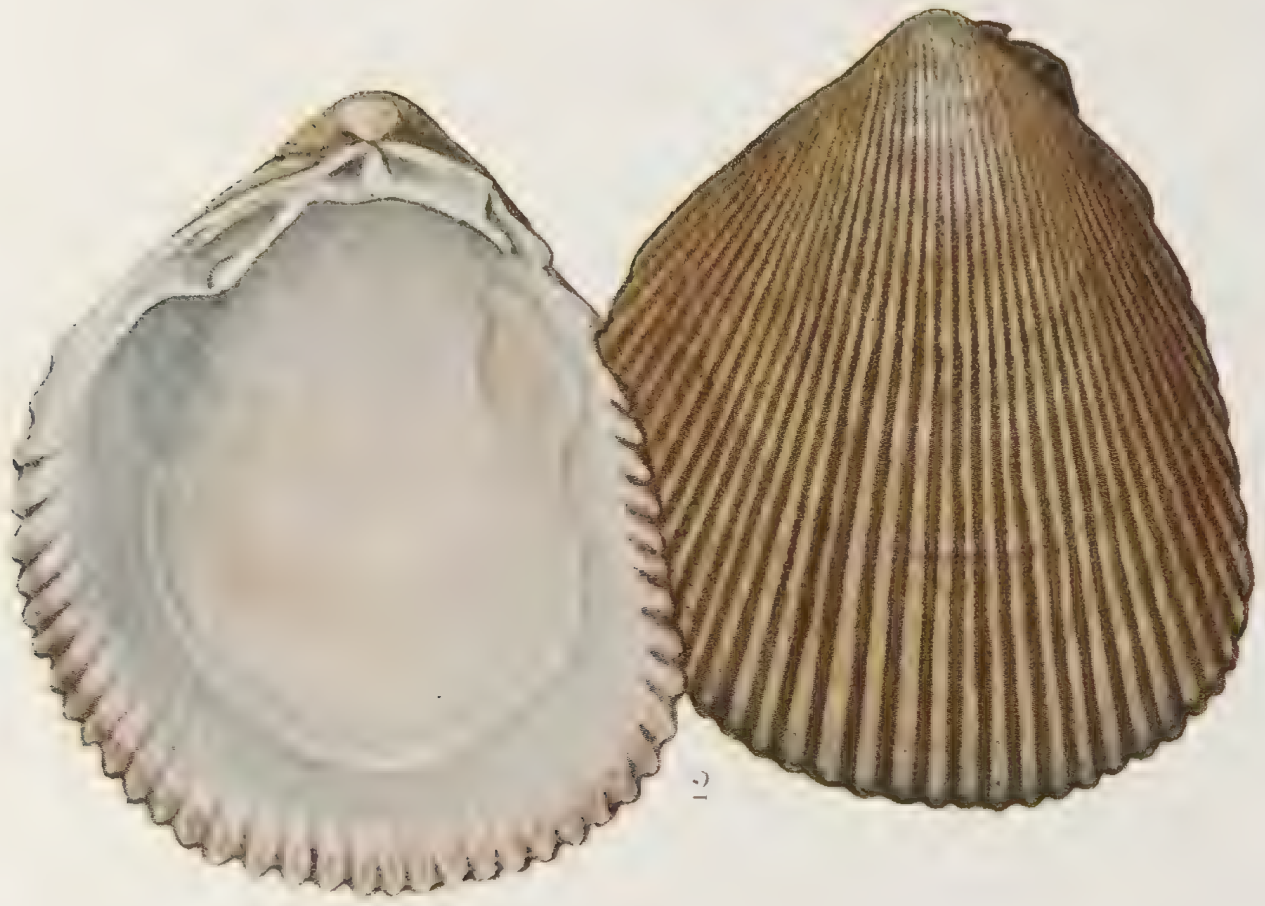

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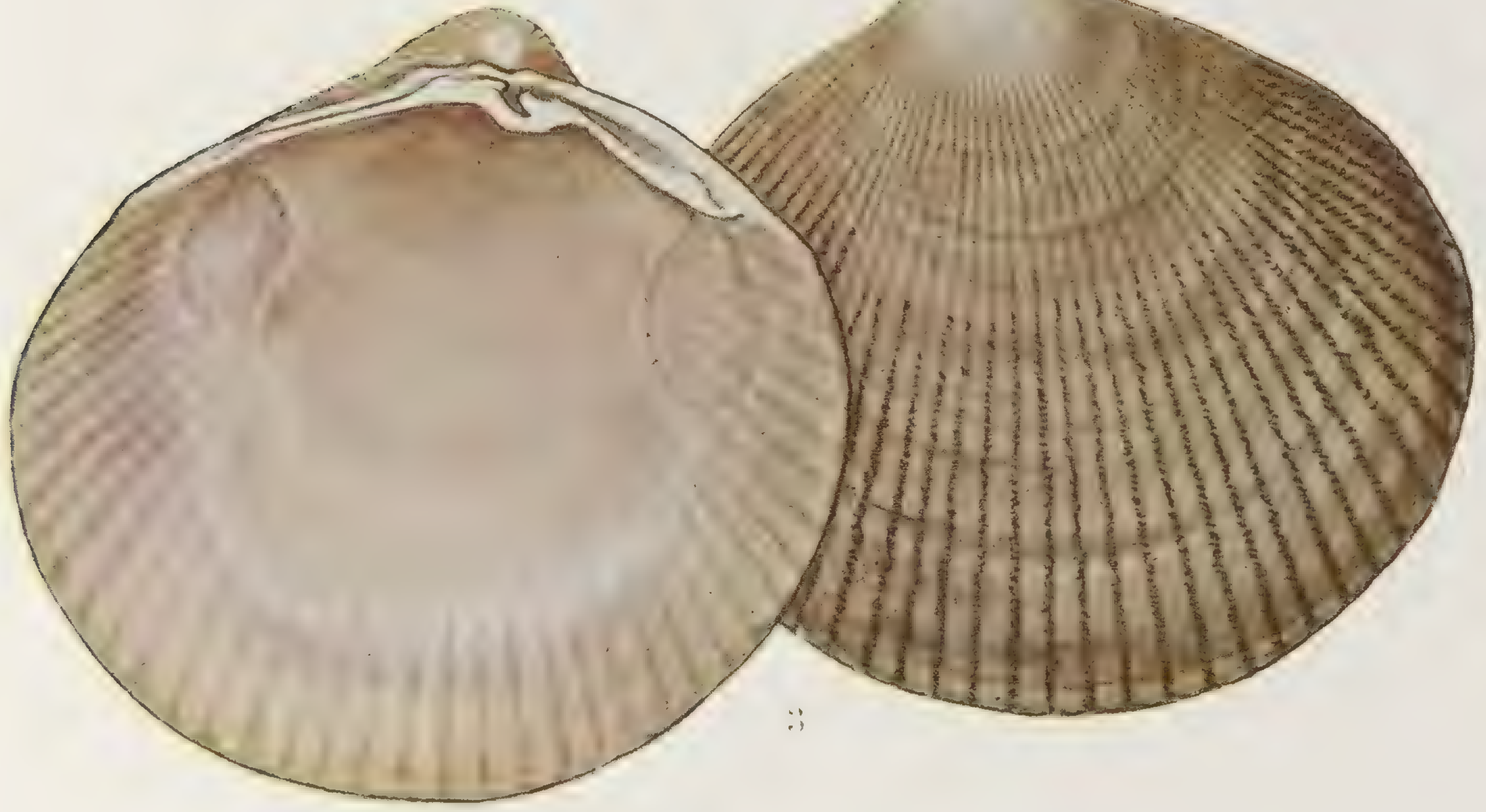

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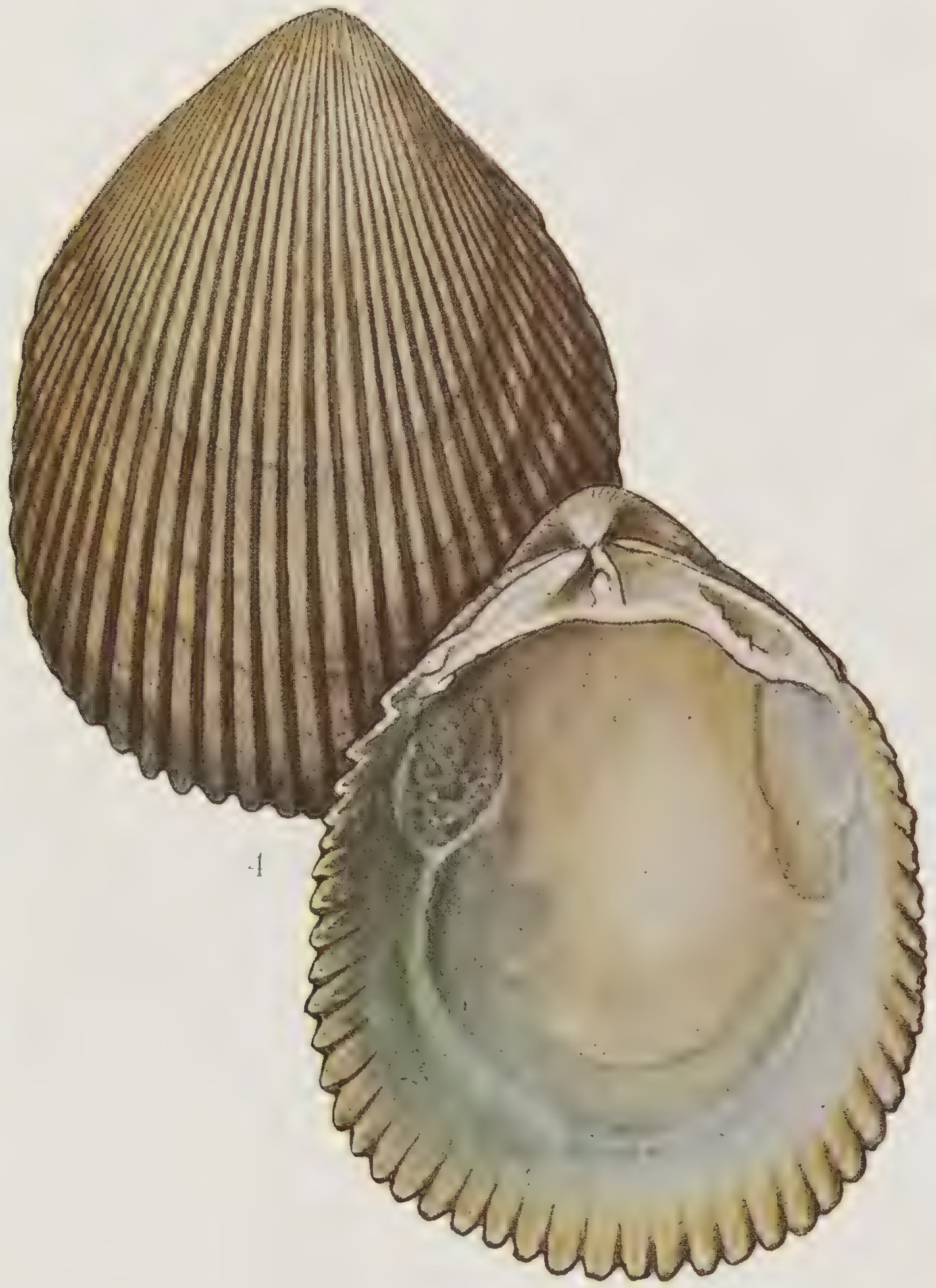

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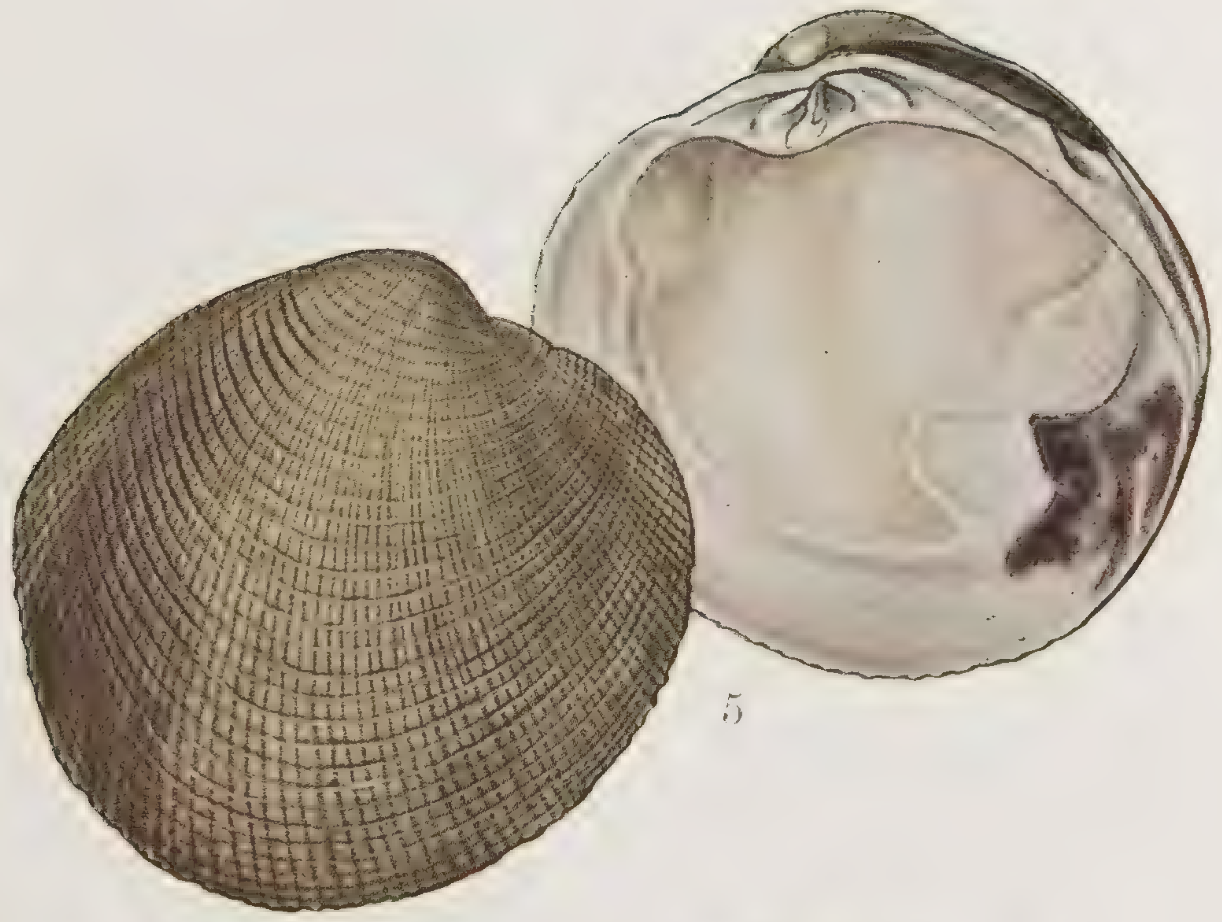

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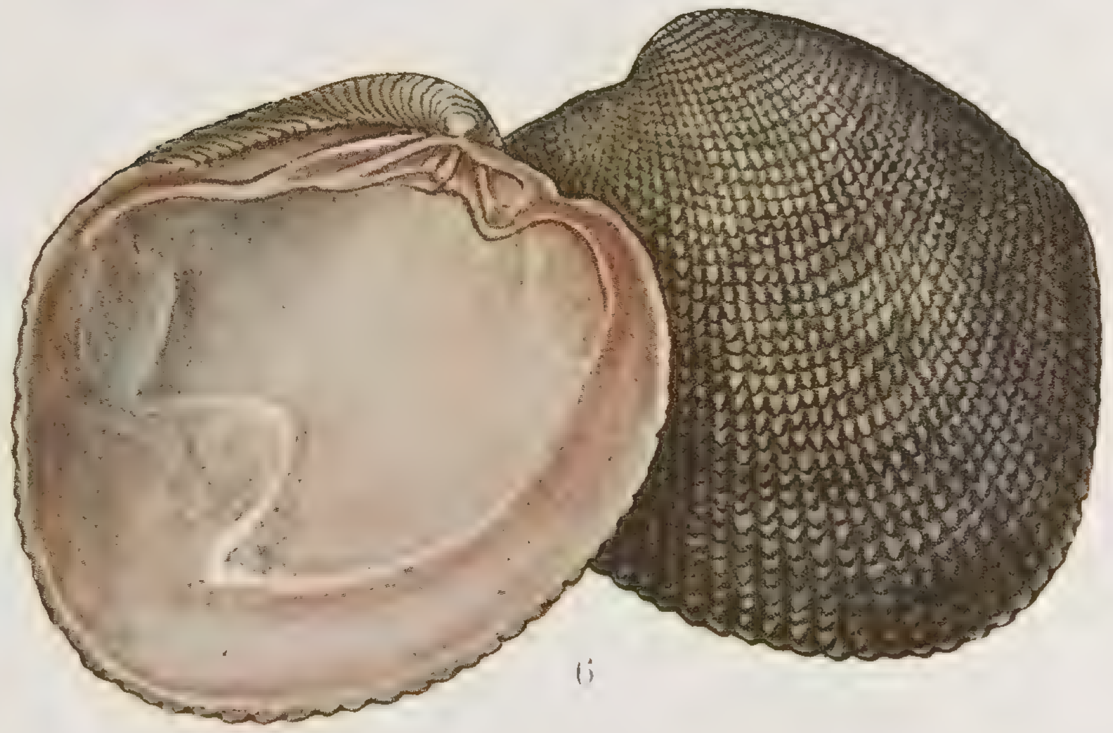

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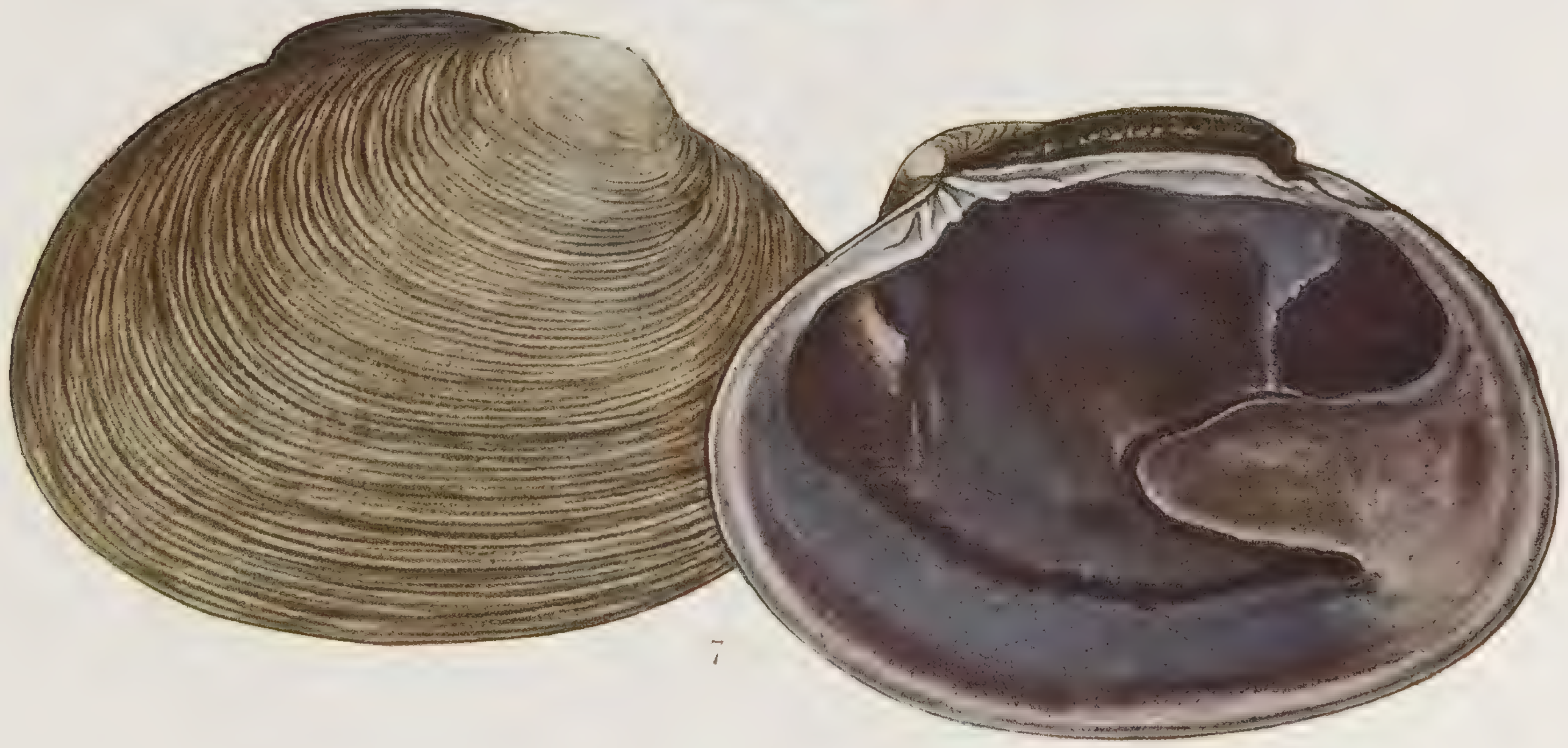


7

ヒレヂヤコ

Tridacna squamosa *Lamarck*

（第八十八圖版　第一圖）　×⅔

巨大なる二枚貝にして，殼表には放射肋上に鱗狀の隆起物を有するを以て「ヒレヂヤコ」の名ある所以なり．該肋間には 7–8 條の小放射肋を有す．殼色は淡黃色にし美麗なり．殼の內面は白色にして瀬戸物樣の光澤を有す．小形なるものにても殼長120粍位ありて薩摩，琉球及び八重山島の如き暖海に產す．肉は美味なり．

貝殼は種々の裝飾又は器具に用ひらる．動物體は種々の色彩を有し，美麗なるを以て，珊瑚礁中に群棲する時は壯觀なり．

ナガシヤコ

Tridacna elongata *Lamarck*

（第八十八圖版　第二圖）　×1

シヤコ類中小形のものにして貝殼は長楕圓形なり．殼表上の 5–6 放射肋は悉く前方に斜行し，鰭を有するも不顯著なり．

殼色は帶黃白色にして，背緣に於ける前丘は後丘より長く，前丘の後方殼頂に近く存在する貝絲彎入は左右兩殼により長楕圓形を呈す．殼の內面は白色にして瀬戸物樣光澤を有す．殼長 125 粍內外に達し，小笠原島，薩摩，琉球，八重山島等主とし西南海に產す．一名「シラナミ」と稱す．

シヤコ

Tridacna gigas (*Linné*)

（第八十八圖版　第三圖）　×¼

最大の二枚貝にして，殼長 1.2 米重量 250 瓩に達するものあり．兩殼片は相等しく殼は略ぼ三角形をなし，頗る强厚なり．殼表には約 5 條の幅廣き放射肋あり，腹緣に於て深く波狀をなして嚙み合ふ．殼表には覆瓦狀の彫刻を重ね，色は灰白色なり．內面は白く光澤を有す．生時の貝肉はその色彩美麗なり，外套膜は青くその緣邊に黃綠色の眼點あり中心は鮮紫色を呈す．强靱なる貝絲を以て岩礁に附着す．

琉球，臺灣，小笠原島及び我が裏南洋の統治諸島より廣く印度洋に亘りて產し，土人は好みて此の肉を食用にす．古より七寶中に列せられ，水盤，植木鉢，其他種々の裝飾品を作る．

シヤゴウ

Hipoppus hipoppus (*Linné*)

（第八十八圖版　第四圖）　×⅔

略ぼ菱形の二枚貝にして，前丘は頗る短く，貝絲退化せるを以て，貝絲孔を有せず，唯此部分にハート型の窪を有するのみ．殼表には 7–8 條の大放射肋と，該肋間に 2–3 條の小條肋とを有す．殼頂は前方に捩れ，殼質は頗る强厚なり．殼の內面は白色瀬戸物樣の光澤を有す．

殼緣の波形彎入は急にして牙狀突起をなす．

殼長 220 粍內外に達し，小笠原島，薩摩，沖繩及び八重山島の如き西南の暖海主として珊瑚礁の如き場所を好みて棲息す．

Tridacna squamosa *Lamarck*

"Hire-zyako"

Pl. LXXXVIII, fig. 1.　×2/3

Shell ovate, four-to-five-ribbed, ribs elevately convex, distant, fimbriately scaled, scales very large, distant, erect, vaulted, interstices between the ribs decussately many-striated; white or saffron yellow, sometimes tinged with red. This species is characterized by a much more symmetrical growth than *Tridacna gigas*. It has no tendency to radiate obliquely, and the scales are developed throughout with amplitude and precision.

Tridacna elongata *Lamarck.*

"Nagazyako"

Pl. LXXXVIII, fig. 2.　×1

Shell ovately oblong, anteriorly elongately produced, five-to six-ribbed, ribs convex, regularly and rather closely scaled, interstices between the ribs two-ridged, between scales smooth; white or lemon yellow.

Tridacna gigas (*Linné*)

"Syako"

Pl. LXXXVIII, fig. 3.　×1/4

Shell very large, rather obliquely produced anteriorly, four-ribbed, ribs densely scaled, scales numerous, close-set, short and more or less obsolete with age, interstices rather obscurely radiately ridged; white, sometimes tinged within with rose.

This colossal species, which attains to the enormous size of from six to seven hundred pounds weight may be distinguished in all its stages of growth by a tendency to radiate anteriorly in an oblique direction, and by the closely-scaled character of the ribs.

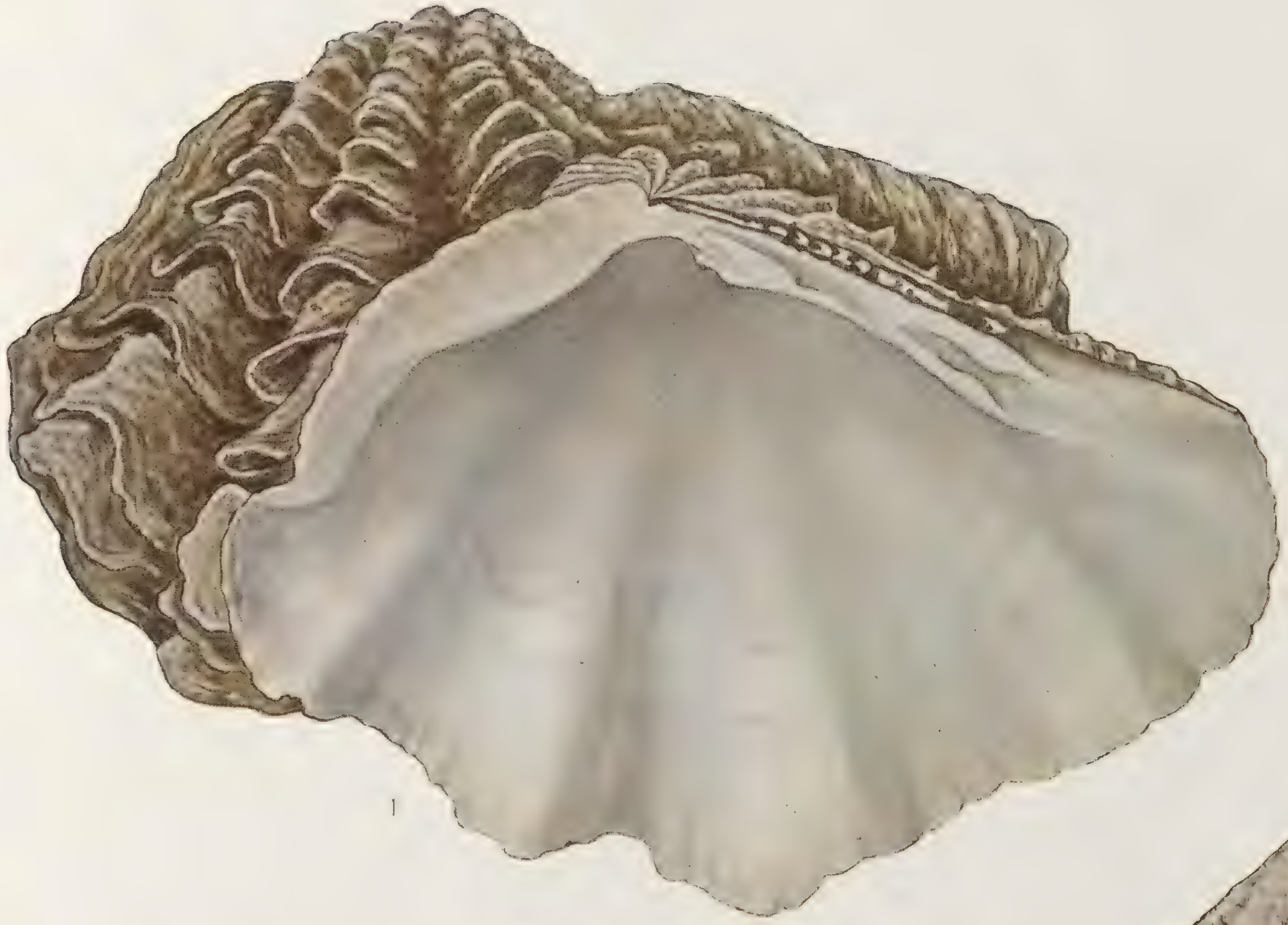
Hipoppus hipoppus (*Linné*)

"Syagô"

Pl. LXXXVIII, fig. 4.　×2/3

Shell somewhat triangularly ovate, trapeziform, anteriorly broadly lunulate, ventricose in the middle, constricted towards the sides, radiately ribbed and ridged, profusely scaled, scales small, leaf-like, spinosely imbricated; marble-white richly spotted with purple-rose.

第八十八圖版 PL. LXXXVIII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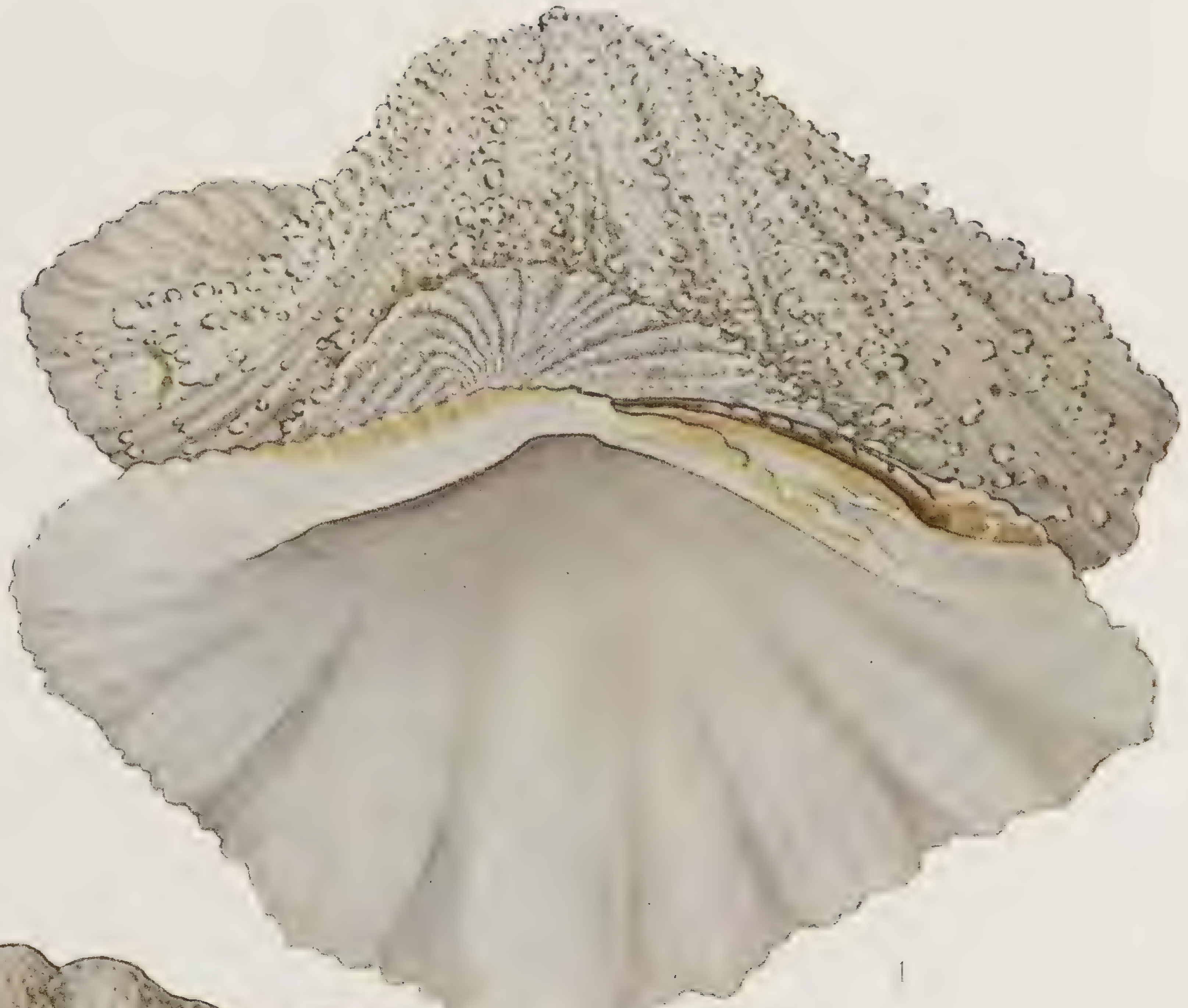
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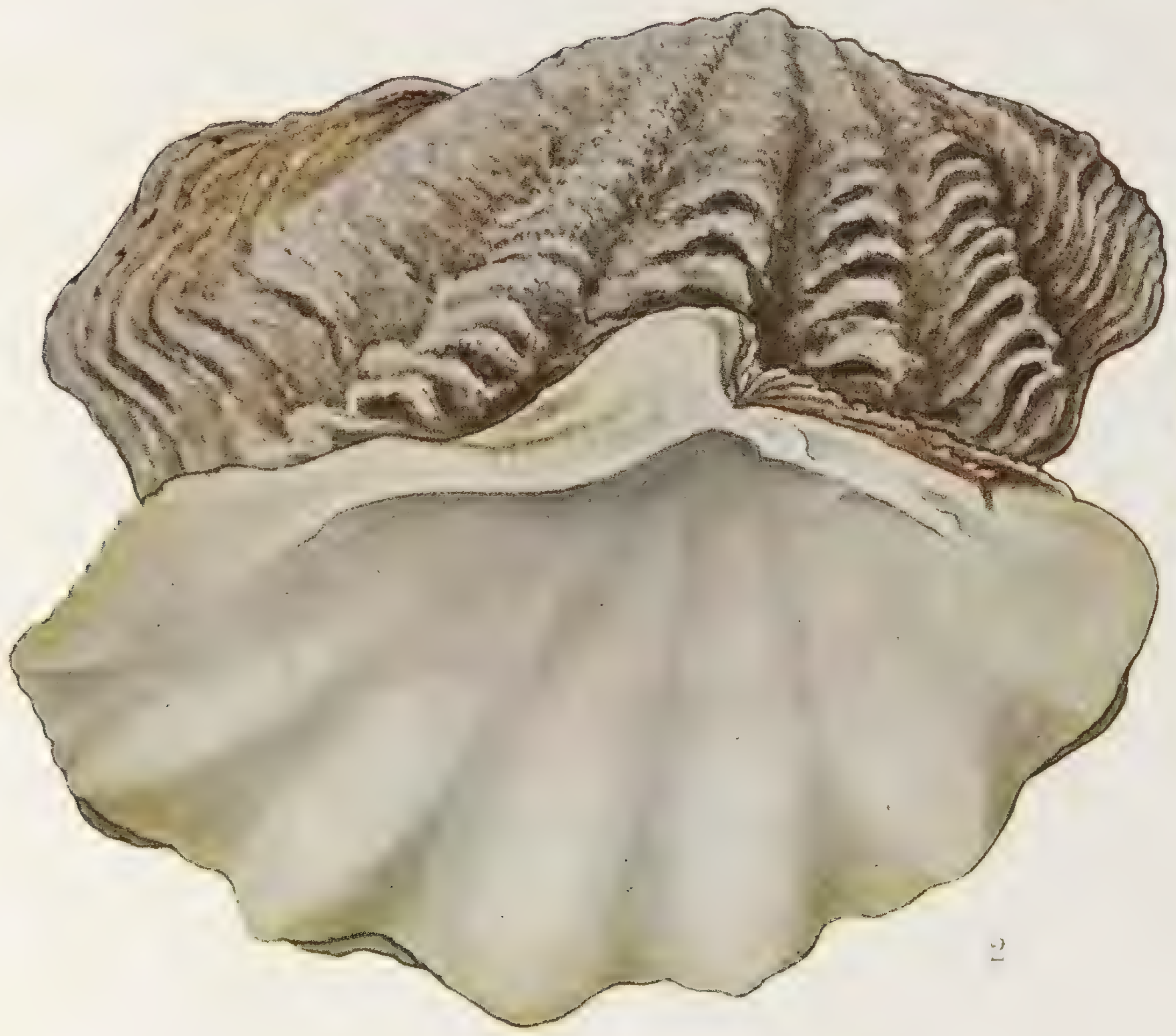
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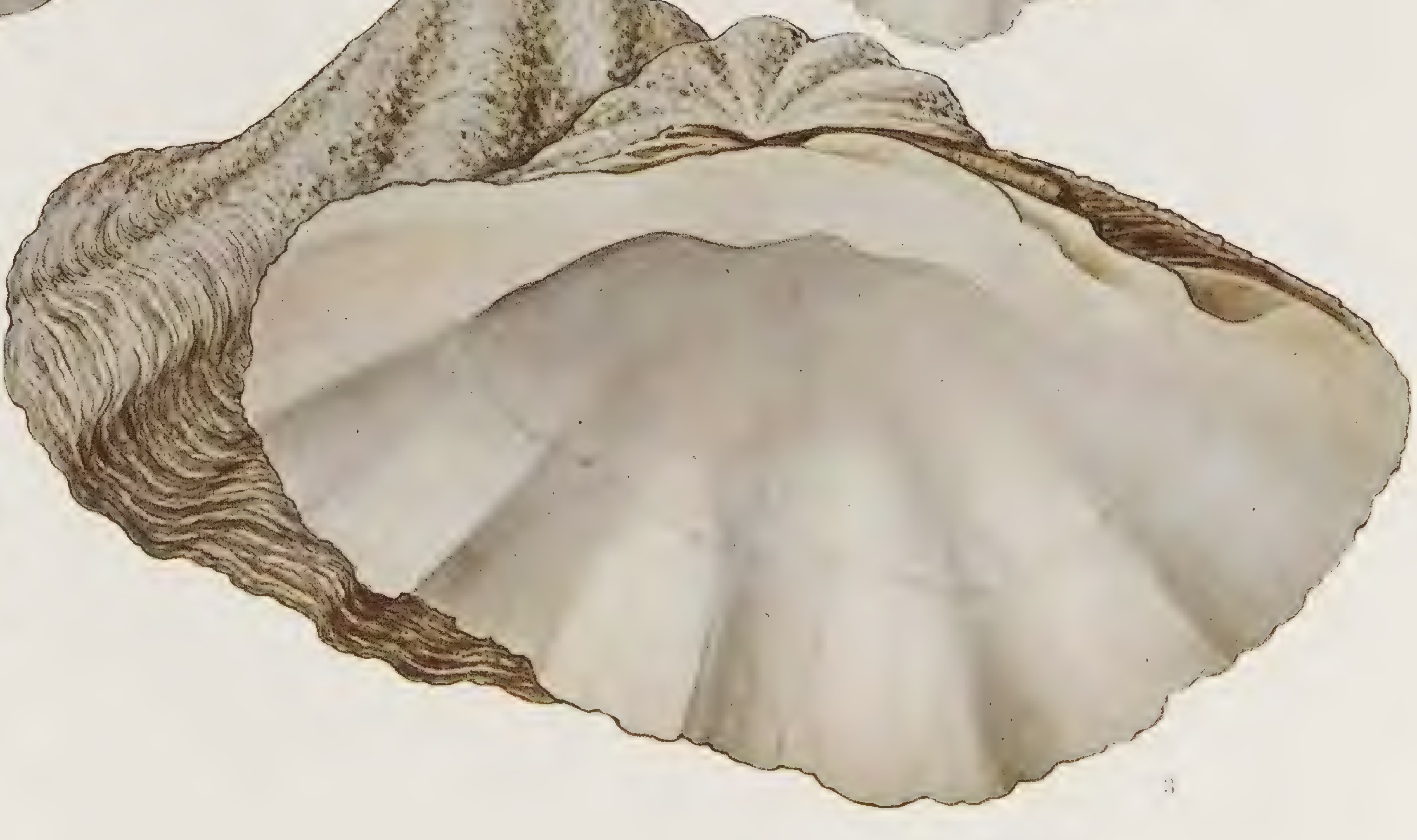
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Protothaca jedoensis *Lischke*

"Onisasari"

Pl. LXXXIX, fig. , ×1

Shell nearly circular, thick, inflated, inequi- [illegible] with [illegible] mm in length; inhabi- [illegible] seas, distributed [illegible] northern Japan. One of the edible mollusks.

Mya arenaria japonica *Jay*

[illegible]

Mercenaria stimpsoni *Gould*

[illegible]

Distribution, [illegible] northern Japan.

[illegible]

Solen gouldii *Conrad*

"Mategai"

Pl. LXXXIX, figs. 1, ×1

Shell elongate, subcylindrical; dorsal and ventral margins straight and parallel, [illegible] [illegible] [illegible] from [illegible] to Kyushu. [illegible]

Solen krusensterni *Schrenck*

[illegible]

Solen [illegible]

[illegible]

Solen gouldii *Conrad*

Pl. LXXXIX, fig., ×1

Protothaca jedoensis *(Lischke)*

Solen gouldii *Conrad*

Solen krusensterni *Schrenck*

マテガヒ

Solen gouldi *Conrad*

（第八十九圖版第　一，二圖）　×1

眞直亞圓柱狀の二枚貝にして，殼の背腹兩線は全く平行し，前端部は斜に切られ，殼頂は前端にあり．殼質薄脆にして，其表面には絹絲樣の稍不明瞭なる成長腺を有し，黃蒼色にして，滑かなる角質の殼皮を被る．殼の內面は白く主齒は 1 個にして殼の前端部にあり．鋭く小牙狀を呈す．

長 120 粍位．本州，四國，九州に產し肉は食用に供せらる．

オホマテ

Solen grandis *Dunker*

（第八十九圖版　第三圖）　×1

貝殼は幅廣く稍脹れ黃蒼色の地に紫色の縞有り．殼の背緣は直線をなし，腹緣は薄く中央前に於て少しく狹まる．前端部は腹緣に向ひ斜行するも，後端部は丸味を有して狹まる．

殼長 115 粍位．

エゾマテガヒ

Solen krusensterni *Schrenck*

（第八十九圖版　第四圖）　×1

貝殼は幅廣く，短く，殼質薄脆にして脹れ少しく曲る．殼の背緣は曲り，腹緣は前後兩端部に向ひ稍傾斜の狀を呈す．前端部は斜めに曲るも，後端部は丸味を帶ぶ．强靱なる角質の殼皮を被り光澤稍强し．殼の內面は白く，主齒は 1 個にして尖り前端部にあり．殼長 75 粍位．

アカマテガヒ

Solen gordonis *Yokoyama*

（第八十九圖版　第五圖）　×1

「マテガヒ」に似て稍脹れ且短き二枚貝なり．殼質稍堅固にして「マテガヒ」の如く殼の前方部斜ならず．左右兩端部の開きは楕圓形を呈す．殼表には黃色地に銅色の斑あり．殼の內面は白色なれごも桃色を交ゆ．殼長 95 粍內外に達す．本州に產し，肉は食用こして美味，乾して支那に輸出す．

ヒラカモジガヒ

Lutraria sieboldtii *Reeve*

（第八十九圖版　第六圖）　×1

貝殼は長楕圓形を呈し，兩端丸味を帶びて稍尖り，表面には同心圓の粗き輪脈を有す．殼頂は頗る小さく中央を離れ前方に近く存在す．殼は鈍白色を呈し，其表面に黃蒼色の表皮を被る．

本州より九州に至る淺海の砂底に棲息す．

オニアサリ

Prototthaca jedoensis (*Lischke*)

（第八十九圖版　第七圖）　×1

貝殼は稍圓形に近く，脹大し，殼頂は高く前方に傾く．殼表は稍幅廣き放射肋こ微細なる輪層により粗き布目狀を呈す．殼の內面は白色にして周緣には微細なる鋸齒目を刻す．蝶番には主齒 3 個を具へ其表面には溝を有す．

殼長 50 粍內外に達し，本州，四國，九州に產す，肉は食用に供せらる．

オホノガヒ

Mya arenaria japonica *Jay*

（第八十九圖版　第八圖）　×1

貝殼は長楕圓形をなし，殼頂は稍前方に偏す．前端部は丸く後端部は狹長に突出し，其兩端部には間隙を存す．殼表は灰白色，內面は白色なり．左殼の殼頂直下には顯著なる箆形突起を有す．外套痕の彎入は著しく深く中央より尙前方に達す．

殼長 100 粍內外に達し本邦至る所に產し，肉は食用に供せらる．

ビノスガヒ

Mercenaria stimpsoni (*Gould*)

（第八十九圖版　第九圖）　×1

亞三角形の二枚貝にして前丘はハート型を呈し小さく，靱帶は黑くして可成り長し．殼頂は小なるも脹れ前方に向ふ．殼表には殼頂を中心に多數の薄板樣の輪脈を刻し灰白色なり．殼の內面は白色にして周緣には微細なる刻目を有す．蝶番は厚く各片に分出せる 3 主齒を有す．

殼長 90 粍內外に達し，本州，北海道，樺太に產す．

ツツガキ

Pericillus giganteus *Sowerby*

（第八十九圖版　第十圖）　×1

貝殼は長梯形にして，後緣部は膨大し約 100 度の角度をなし，其表面には同心狀に粗き波形の皺集る．前緣部は不規則なる筒狀片集りて膨大し細石なごを包閉す殼表は疎雜に砂及び貝殼片にて被はる．

長約 250-300 粍に達す．

Solen gouldi *Conrad*

"Mategai"

Pl. LXXXIX, figs. 1, 2.　×1

Shell straight, subcylindrical; dorsal and ventral margins straight and parallel; anterior end truncate obliquely, posterior end also truncate, straight perpendicularly. Umbo situated at the anterior end; surface of shell with an epidermis of horny yellowish olive and faint lines of growth, and interior white. The one main tooth at anterior margin pointed and small canine like.

It attains to 120 mm. in length. Widely distributed from Honsyu to Kyusyu. Tasty as food.

Solen grandis *Dunker*

"O-mate"

Pl. LXXXIX, fig. 3.　×1

Shell broad, subcompressed, striped with purple, anteriorly rather attenuated; dorsal margin rather straight, area rather broad; ventral margin a little narrowed before the middle, posterior margin narrow, rather roundly square; anterior margin simple, very obliquely acuminated at the ventral margin.

Solen krusensterni *Schrenck*

"Yezomategai"

Pl. LXXXIX, fig. 4.　×1

Shell bread, short, pale, a little curved, compressed; dorsal margin depressed, curved, area narrow; posterior margin rather rounded, anterior side raised, oblique, curved; ventral margin a little sloped upwards at each end; covered by a firm, glistening, horn-coloured epidermis. Hinge with a single, erect, recurved, triangular tooth in each valve. Mesures about 70 mm. in length.

Solen gordonis *Yokoyama*

"Akamategai"

Pl. LXXXIX, fig. 5.　×1

Shell linear, straight, with upper and lower margins straight and parallel; anterior end truncate, nearly perpendicular and straight or even slightly concave with angles a little rounded; posterior end also truncate, straight, perpendicular with angles somewhat more rounded than those of anterior. Length of shell is about 100 mm. Found in western Japan.

Lutraria sieboldtii *Reeve*

"Hirakamozigai"

Pl. LXXXIX, fig. 6　×1

Shell elongately ovate, curved; side rather acutely rounded; obliquely roughly concentrically striated, dull white, covered with a yellowish-olive epidermis.

Lives in shallow sandy bottoms of central and southern Japan.

Protothaca jedoensis (*Lischke*)

"Oni-asari"

Pl. LXXXIX, fig. 7.　×1

Shell nearly circular, thick, inflated, inequilateral, anterior very short, radiately ridged. Ridges cross the concentric nodal lines Interior colour white and ventral margin of shell is denticulate Three cardinal teeth on hinge-line, with grooves on surfaces.

Shell measures 40-50 mm. in length; inhabits sandy bottoms of shallow seas; distributed throughout central and southern Japan. One of the edible mollusks.

Mya arenaria japonica *Jay*

"Ônogai"

Pl. LXXXIX, fig. 8.　×1

Shell strong, transversely ovate, and moderately convex; posterior side more ample and rounded than the anterior side, which is somewhat acuminated, and pointed at the extremity; external surface generally with concentric wrinkles and irregular striae, mostly of a brownish sand colour; one valve with a broad, thick, perpendicular tooth.

Common everywhere, burrowing in muddy bottoms at the mouth of the rivers, or inner bays. Length about 100 mm., its siphon is used as food.

Mercenaria stimpsoni (*Gould*)

"Binosugai"

Pl. LXXXIX, fig. 9.　×1

Shell solid, rather compressed, ovately triangular broader than high, bluntly angular behind, very inequilateral, the beacks being near the anterior margin. Surface ornamented with thin, erect, concentric lamella. Lunula deep, well bounded, longly cordate. Area very long rather distinctly bounded, taking nearly the whole length of the postero-lateral slope of the shell. Of the three strong main teeth, the middle one in the left valve is bifid, while in the right the middle as well as the posterior are bifid. The inner margin of shell is finely crenulate.

Distribution, for northern to southern Japan.

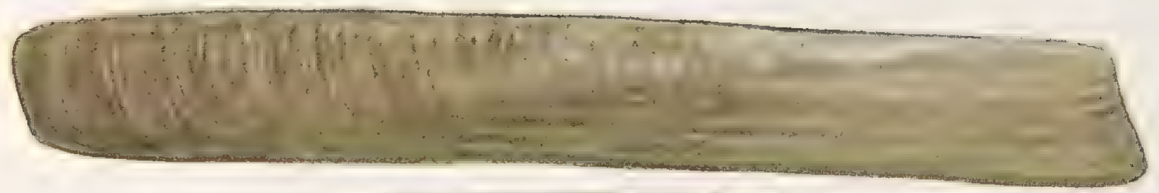
Pericillus giganteus *Sowerby*

"Tutugaki"

Pl. LXXXIX, fig. 10.　×1

Valve irregularly oblong-trapezoidal, delated toward the posterior end, very coarsely concentrically corrugated, and showing under the lens a very fine, irregular wrinkling; standing at an angle to each other of about 100°. Tube rough and sparsely covered with coarse sand and shalls, swollen anteriorly, contracted behind the valves. Anterior end forming a mass of irregularly placed short tubes, among which pebbles, etc., are imbedded, and lacking any trace of a marginal fringe or rosette.

Total length about 250-300 mm.; rarely occurs in muddy bottoms along central and southern coast of Japan.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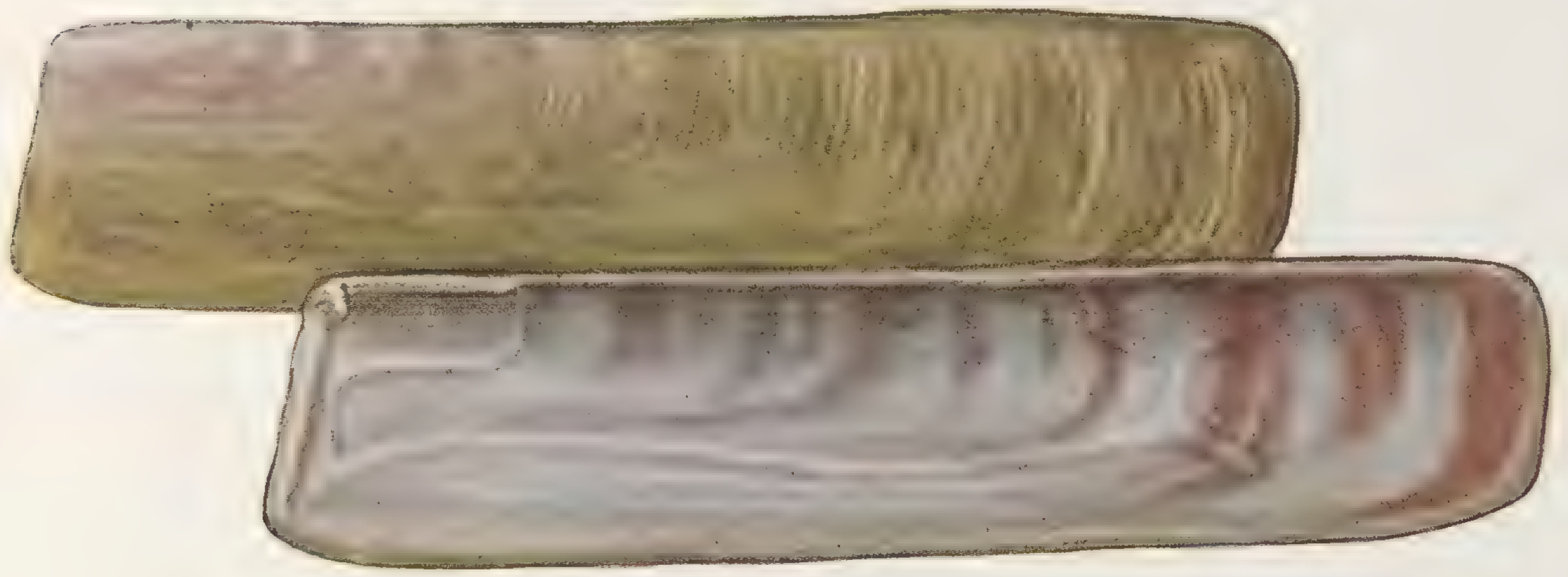
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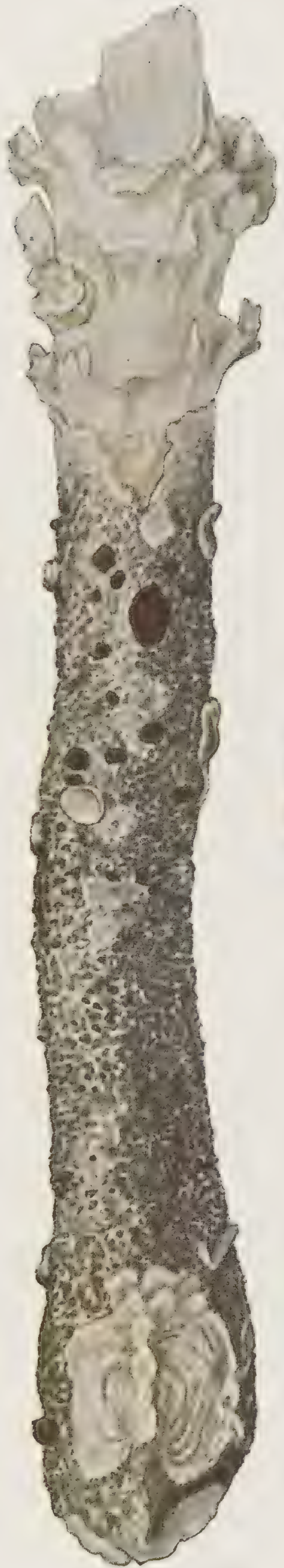
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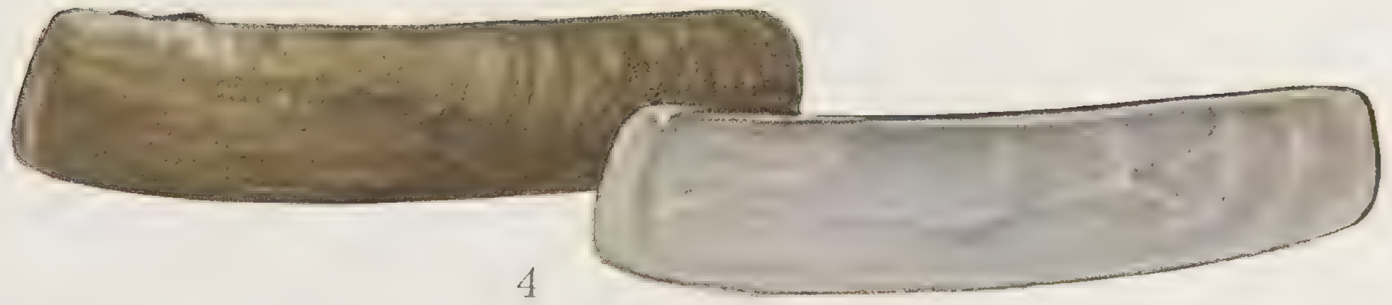
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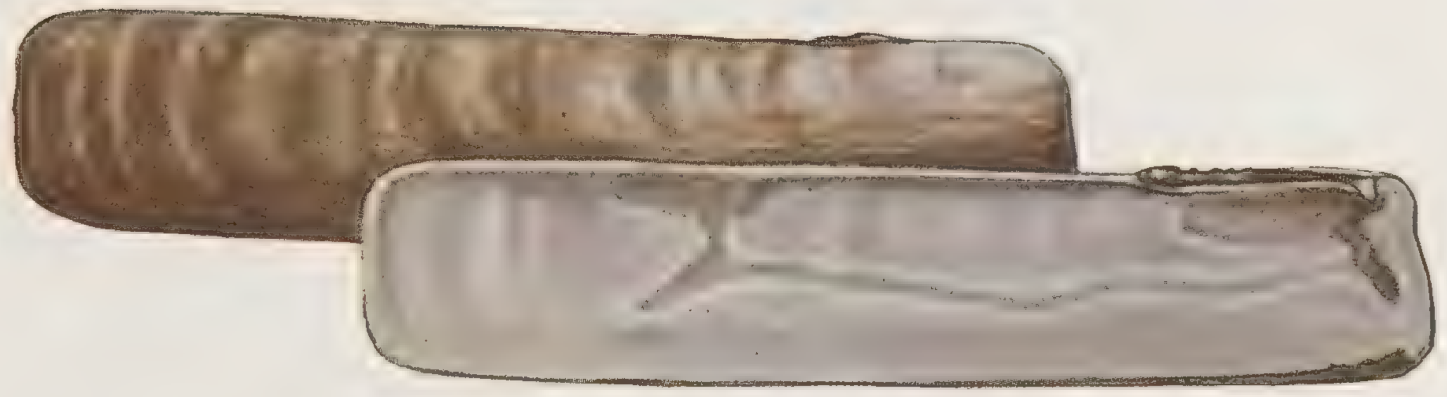
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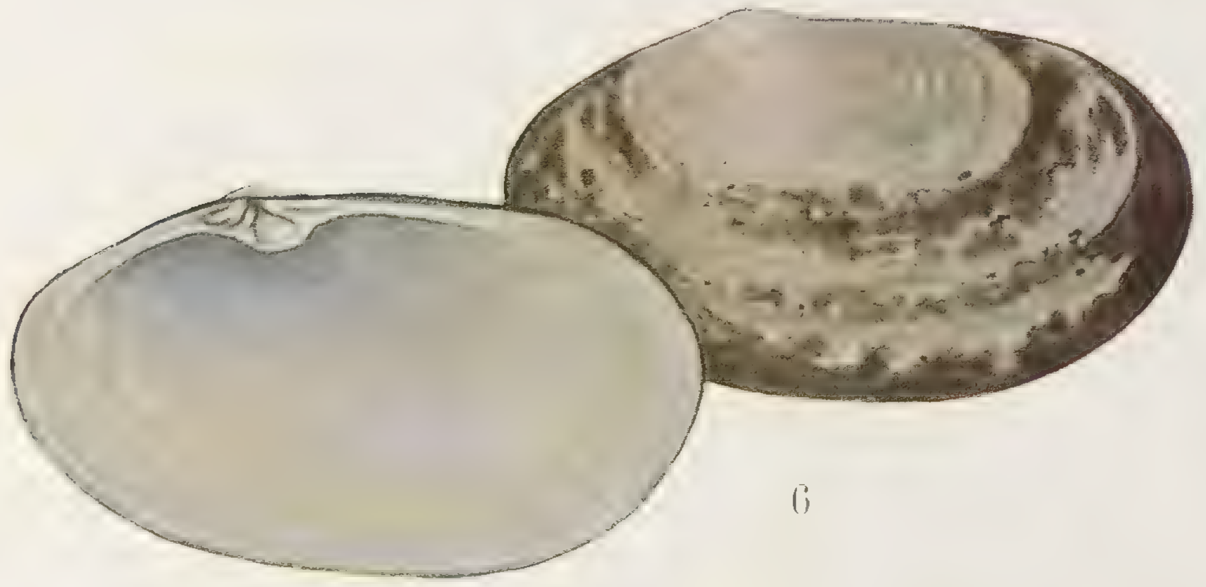
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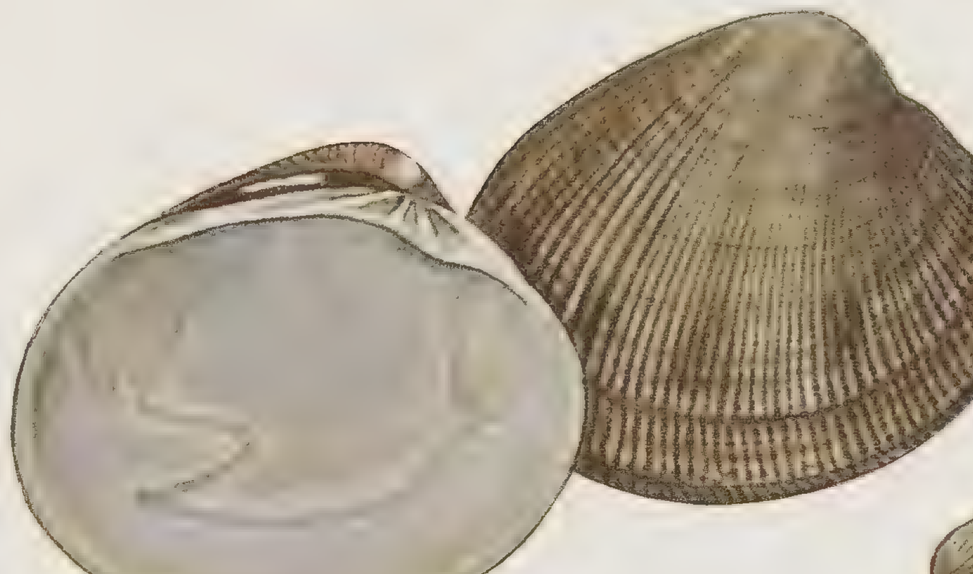
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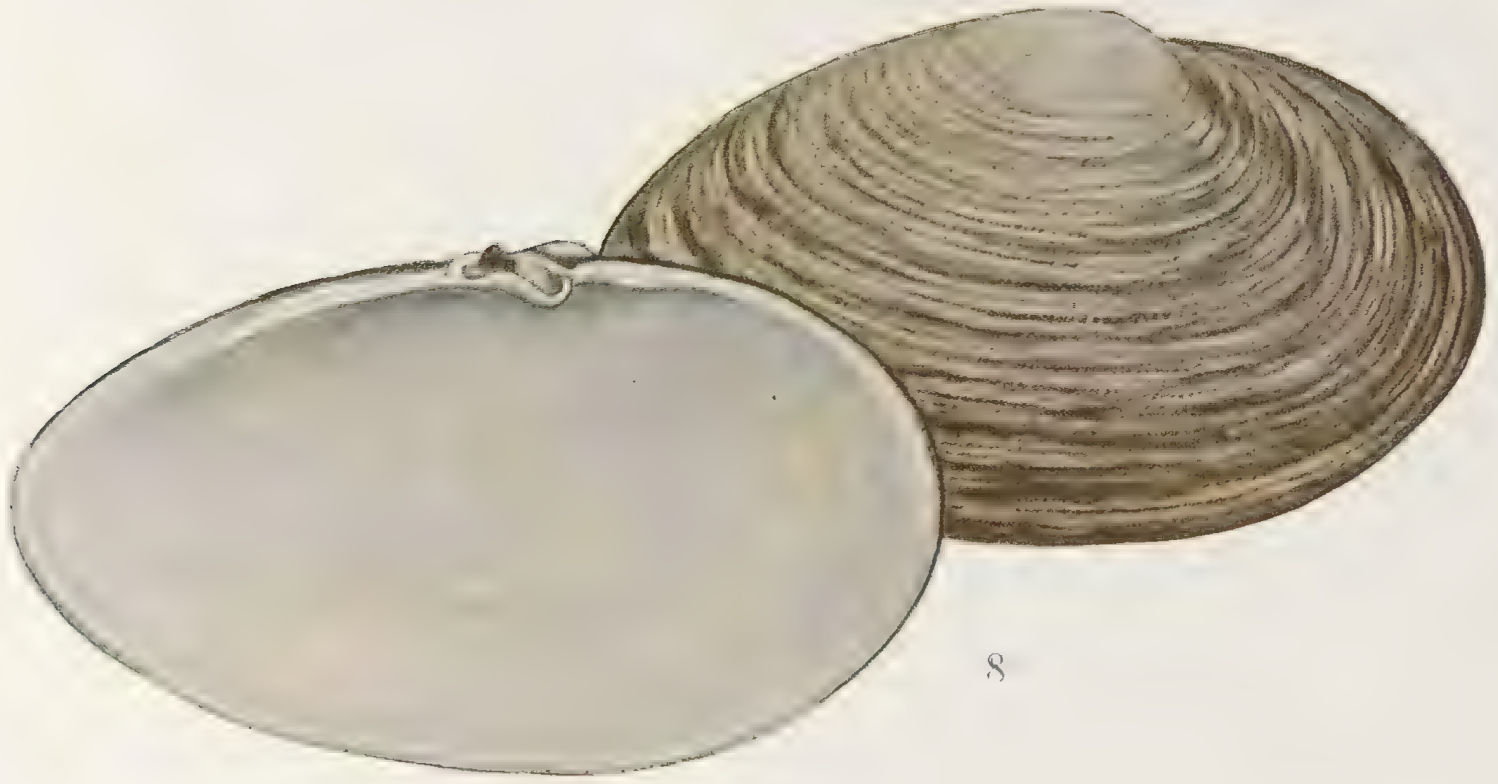
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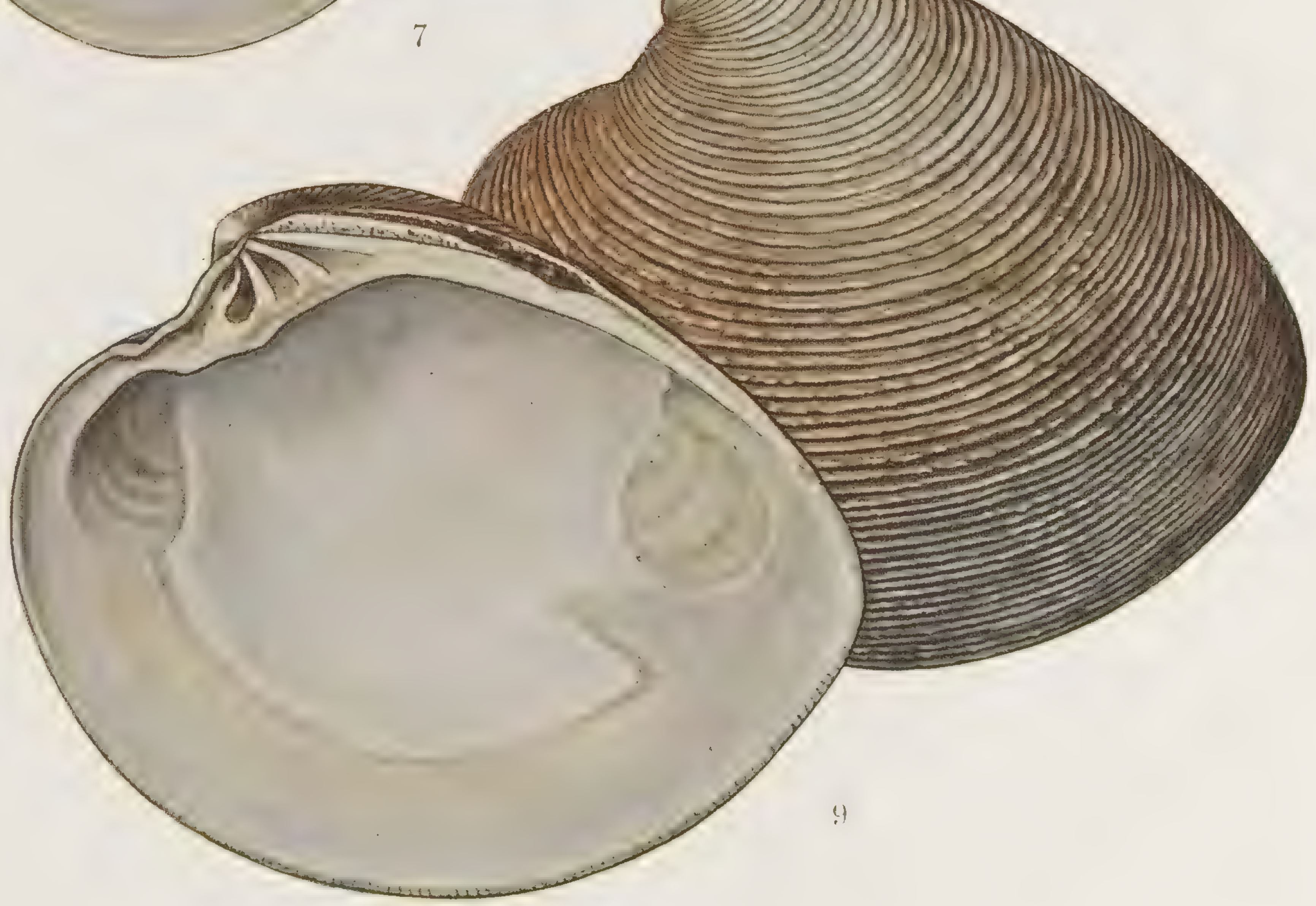
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キヌタアゲマキ

Psammosolen divaricatus (*Lischke*)
(第九十圖版　第一, 二圖)　×1

貝殼は細長にして後端部は裁斷せられたるが如き觀を呈す. 殼頂は前偏し, 殼頂よりは顯著なる放射肋を斜出す. 兩端部の開口大にして腹緣の凹入は微小なり. 兩殼共に主齒 2 個を有すれども其の内 1 個は小なり. 殼表は美麗なる淡桃色を呈し, 前後兩端部は褐色を帶ぶ. 殼の内面も亦淡桃色を呈す.

殼長 63 粍, 殼高 28 粍位. 本邦中部及南部の砂泥地に棲息す.

ソトホリガヒ

Laternula kamakurana (*Pilsbry*)
(第九十圖版　第三, 四圖)　×1

貝殼は小形薄質長方形にして殼片の前後兩端相開く. 殼表は銀白色にして, 殼頂を中心に多くの微細なる成長線あり. 全面は微細なる顆粒狀を呈す. 蝶番には齒を缺くも殼頂直下に小さき匙狀の軟骨附屬物を有す. 殼の内面は白色にして眞珠質なり.

殼長 45 粍, 殼高 23 粍位. 本邦中部及南部淺海の砂泥地に產す.

ニホガヒモドキ

Zirfæa crispata (*Linné*)
(第九十圖版　第五, 六圖)　×1

殼長 40 粍位の貝殼を有し, 殼表中央部には斜の溝を有す. 該斜溝前方部の表面には鑢目狀の彫刻顯著なれども後方部は平滑にして輪脈顯る. 殼の前端の開き大にして下方の間隙叉大なり. 殼表及び殼の内面は白色なり. 蝶番には齒無く該部に於ける突起は稍披針狀を呈し, 殼の中央部には斜の隆起線を有す.

本邦中部及南部濱海の岩石中に穿孔して棲息す.

ウミタケ

Barnea latissima (*Sowerby*)
(第九十圖版　第七, 八, 九圖)　1×

貝殼は稍扁平亞四邊形をなし, 前端部は細尖となる. 殼の前端部は開きて下方に大なる間隙を有す. 殼表には殼頂を中心とする輪脈と小結節を有する放射肋と交叉して鑢目狀を呈し, 殼地は灰白色なり. 殼の内面は白色にして蝶番には齒無く, 殼頂突起は反曲し該部に披針形の突起を出す.

殼長 66 粍, 殼高 35 粍位. 瀨戸内海及有明灣の砂泥中に棲息し其水管は食用に供せらる.

ニツクワウガヒ

Tellina virgata jubar *Hanley*
(第九十圖版　第十圖)　×1

貝殼は幅廣く扁平に近く, 殼の前端部は丸く後端部は稍細まりて尖る. 殼頂を中心に多くの輪脈を有し, 薔薇色の放射帶及び放射條を交へ美麗なり.

殼長 70 粍, 殼高 50 粍位に達し, 本邦中部及南部淺海の砂泥地に產す.

ウラキツキガヒ

Codakia interrupta (*Lamarck*)
(第九十圖版　第十一圖)　×1

貝殼は圓形, 殼質堅固なり. 殼頂小さく前方に向ひ, 殼頂を中心に多くの輪脈を有し, 該脈は放射脈と交りて粗き鑢膚狀を呈す. 主齒は 1 個, 後側齒長し. 殼表は淡黄褐色を帶び, 殼の内面は黄色を呈し其緣は淡紅色の細帶を彩る. 前肉柱痕は卵形をなすも, 後肉柱痕は長卵形なり.

殼長 40 粍位. 琉球, 臺灣等の暖海に產す.

イヨスダレ

Paphia undulata (*Born*)
(第九十圖版　第十二圖)　×1

貝殼は長楕形にして殼頂は前方に位し, 殼の後端部は稍長く延ぶ. 殼表は黄褐色の地に紫菫色の網目模樣を彩り, 特に腹緣及靱帶部著明なり.

殼長 60 粍, 殼高 35 粍位. 本邦中部及南部の淺海砂泥地に棲息す.

アゲマキ

Sinovacula constricta (*Lamarck*)
(第九十圖版　第十三圖)　×1

貝殼は略圓筒形にして, 殼片の前後兩端は丸味を帶びたる方形を呈し開口せり. 殼頂は前方に扁し腹緣中央部は少しく凹入す. 主齒は右殼に 2 個, 左殼に 3 個あり. 殼表は淡褐色にして細き輪層多く汚黄色の殼皮を被る. 殼の内面は白色なり.

靜穩なる暖海を好み干滿潮線間の泥底に深さ 50–80 糎の圓孔を作りて棲息す. 該孔の泥面には常に入水及び排水兩管孔の孔ありて 2 孔の大きさ及び距離は貝の大小と並行す. 十月頃より翌年 一, 二月頃に亘りて產卵し, 3 年にして 100 粍内外に達す. 有明灣に饒產し, 兒島灣は有明灣より移植され養殖盛んなり. 肉は食用として美味なり. 乾製品は支那に輸出せらる.

ムラサキガヒ

Soletellina adamsii *Reeve*
(第九十圖版　第十四圖)　×1

貝殼は長楕圓形にして, 殼の前端丸く後部は稍突出す. 兩殼は不等片にして完全に合はず特に後端部は稍間隙を殘す. 殼地は蒼紫色にして橄欖色の殼皮を被る. 殼の内面は濃菫色を呈し外套痕は顯著にしてその彎入大なり.

殼長 120 粍殼高 60 粍位. 本邦中部及南部淺海砂地に棲息す.

Psammosolen divaricatus (*Lischke*)

"Kinuta-agemaki"
Pl. XC, figs. 1, 2.　×1

Shell oblong, truncated at each end, gasping, pink, with two white rays in the middle; smooth anteriorly, towards the anterior angle, and posteriorly sculptured with obliquely arched sulci; angular and divergent near the posterior dorsal margin; dorsal and ventral margin straight.

Shell measures about 63 mm. in length, 28 mm. in height; inhabits muddy bottoms in central and southern Japan.

Laternula kamakurana (*Pilsbry*)

"Sotōri-gai"
Pl. XC, figs. 3, 4.　×1

Shell equivalve, oblong, thin, hyaline, silvery white, smooth, minutely granulated towards the margins, anterior and posterior sides rounded, both sides gasping.

Shell measures about 45 mm. in length, 23 mm. in height. Inhabits shallaw muddy bottoms of central and southern Japan.

Zirfaea crispata (*Linné*)

"Nihogai-modoki"
Pl. XC, figs. 5, 6.　×1

Shell somewhat wide, separated in the middle by a pitted groove, anteriorly widely open, beaked, trigonal, rayed with very acutely imbricated ribs; posteriorly smooth, short, rather rounded; no dorsal valve.

The tubes of this animal are protected by an external epidermidous case. Inhabits rocks by boring at tidal shore of central and southern Japan. Measures about 40 mm. in length.

Barnea latissima (*Sowerby*)

"Umitake"
Pl. XC, figs. 7, 8, 9.　×1

Shell subcompressed, broad subquadrate, widely open on both sides, widely truncated posteriorly; anterior subacuminated, decussated with concentric ridges and radiating nodulose ribs; umbones subcentral, dorsal margins reflected.

Inhabits muddy bottoms of Inland Sea and Ariake Bay at Kyusyu. Its siphon is used as food.

Tellina virgata jubar *Hanley*

"Nikko-gai"
Pl. XC, fig. 10.　×1

Shell broad, compressed, concentrically ridged, rayed with rose-coloured broad bands and lines; posterior side rather short, ribbed, slightly narrowed, acuminated; anterior side rather inflated, semioval.

Inhabits shallow sandy bottoms of central and southern Japan; measures about 70 mm. in length, 50 mm. in height.

Codakia interrupta (*Lamarck*)

"Uraki-tukigai"
Pl. XC, fig. 11.　×1

Shell rounded, somewhat solid, equivalve, subequilateral, rayed with fine striae, growth lines concentrical; colour of the outer shell brownish, inner side fine yellow, and pinkish towards margin.

Occurs in southern Japan.

Paphia undulata (*Born*)

"Iyosudare"
Pl. XC, fig. 12.　×1

Shall oblong-ovate, rather narrow, fulvous, reticulately waved with purple-violet, especially at the ventral margin and at the lunule and ligamentary area, postorior side concentrically urgose, anterior diagonally obtusely wrinkled.

Shell measures about 66 mm. in length, 35 mm. in height; inhabits muddy bottoms of shallow water in central to southern Japan.

Sinovacula constricta (*Lamarck*)

"Agemaki"
Pl. XC, fig. 13.

Shell oblong, subcompressed, wrinkled at each end, pale, covered with a thin epidermis, middle flattened, rayed with a oblique sulcus; anterior side short, with dorsal margin produced; posterior side much lengthneded, terminas margin obliquely truncated, ventral margin produced.

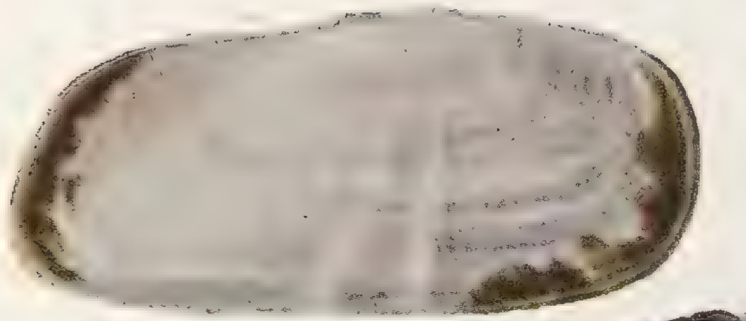
Inhabits muddy bottoms in Kozima Bay, and Ariake Bay; measures about 80–100 mm. in length. Its meat is tasty as food.

Soletellina adamsii *Reeve*

"Murasaki-gai"
Pl. XC, fig. 14.　×1

Shell elongately transverse, rather convex, inequilateral, bluish purple, posteriorly two-rayed, covered with a shining olive epidermis, anterior side round, posterior a little the longer, obliquely compressly truncated.

Occurs central and southern Japan on shallow sandy bottoms; measures about 120 mm. in length.



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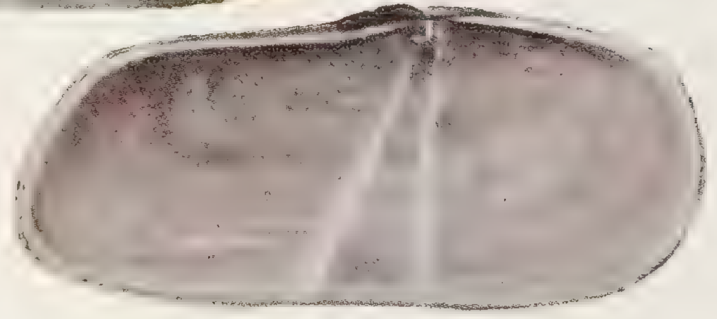

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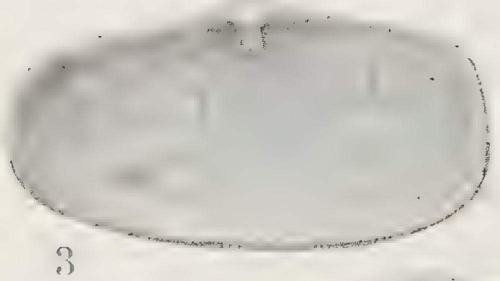

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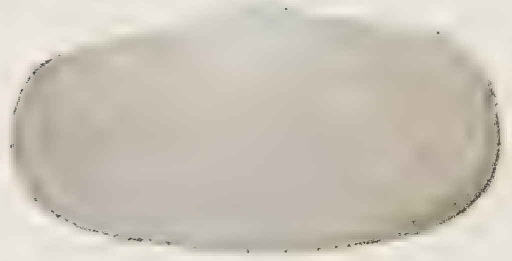

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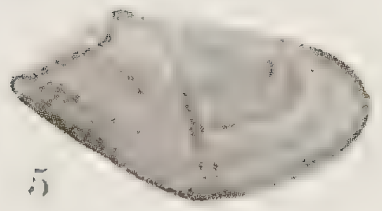

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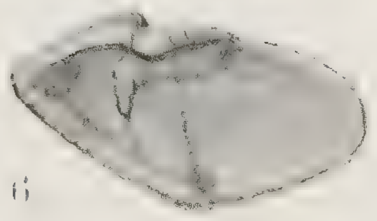

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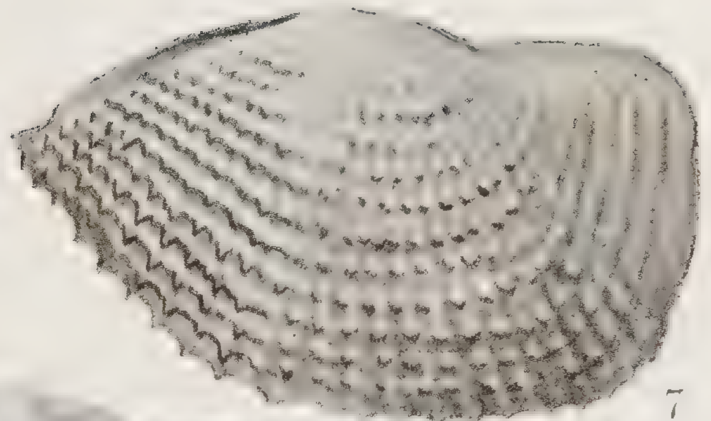

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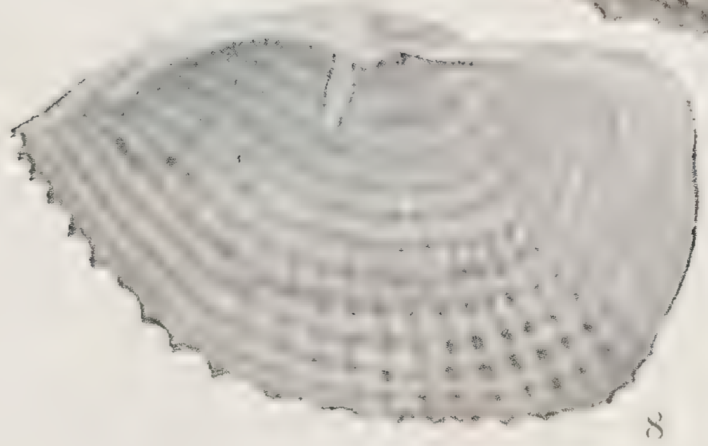

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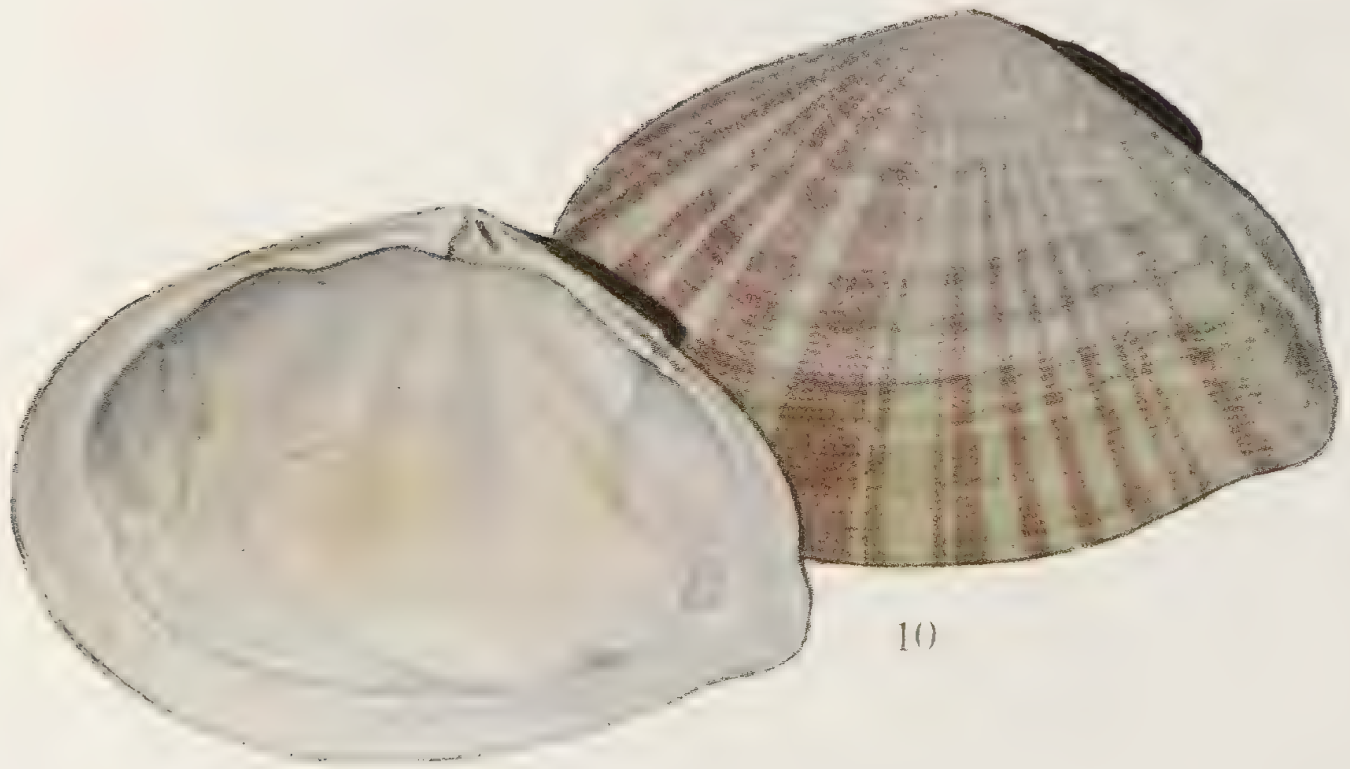

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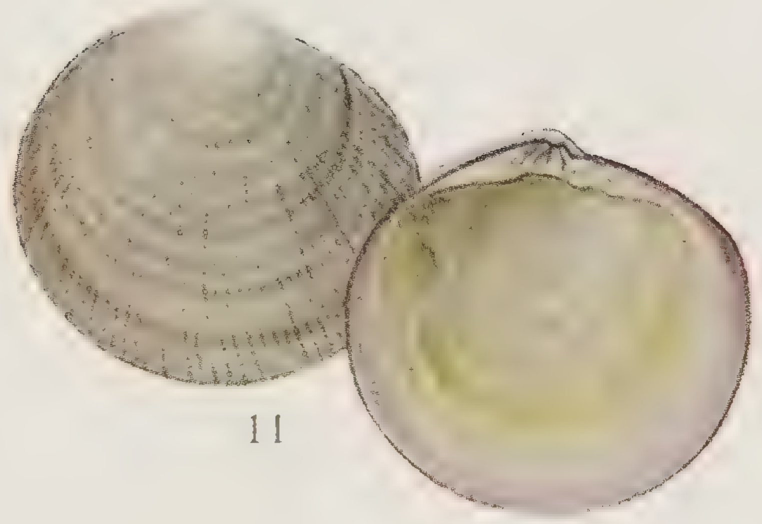

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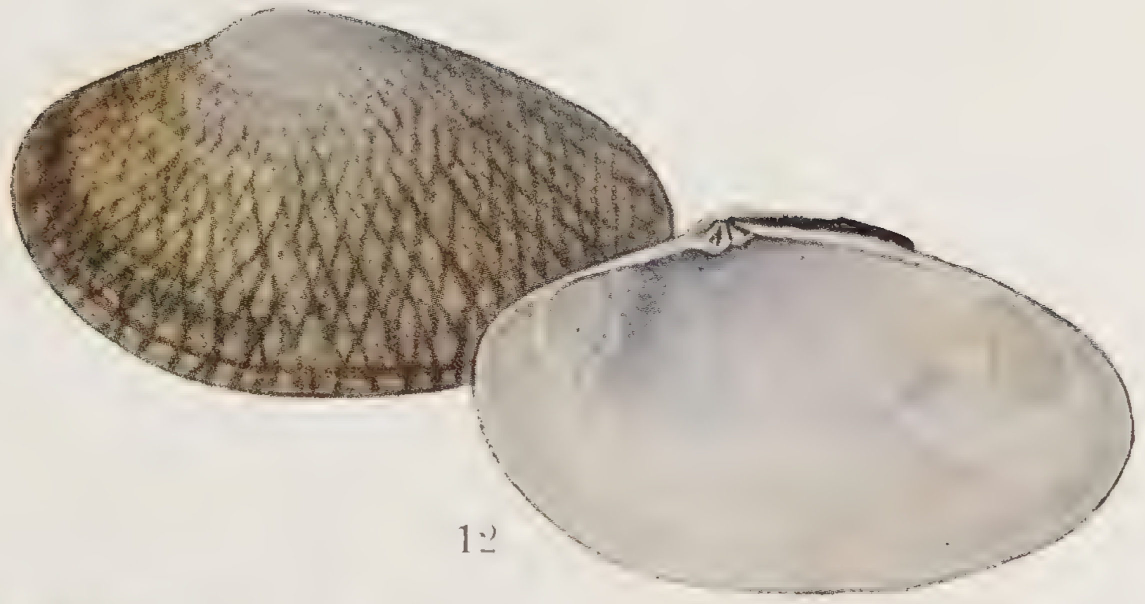

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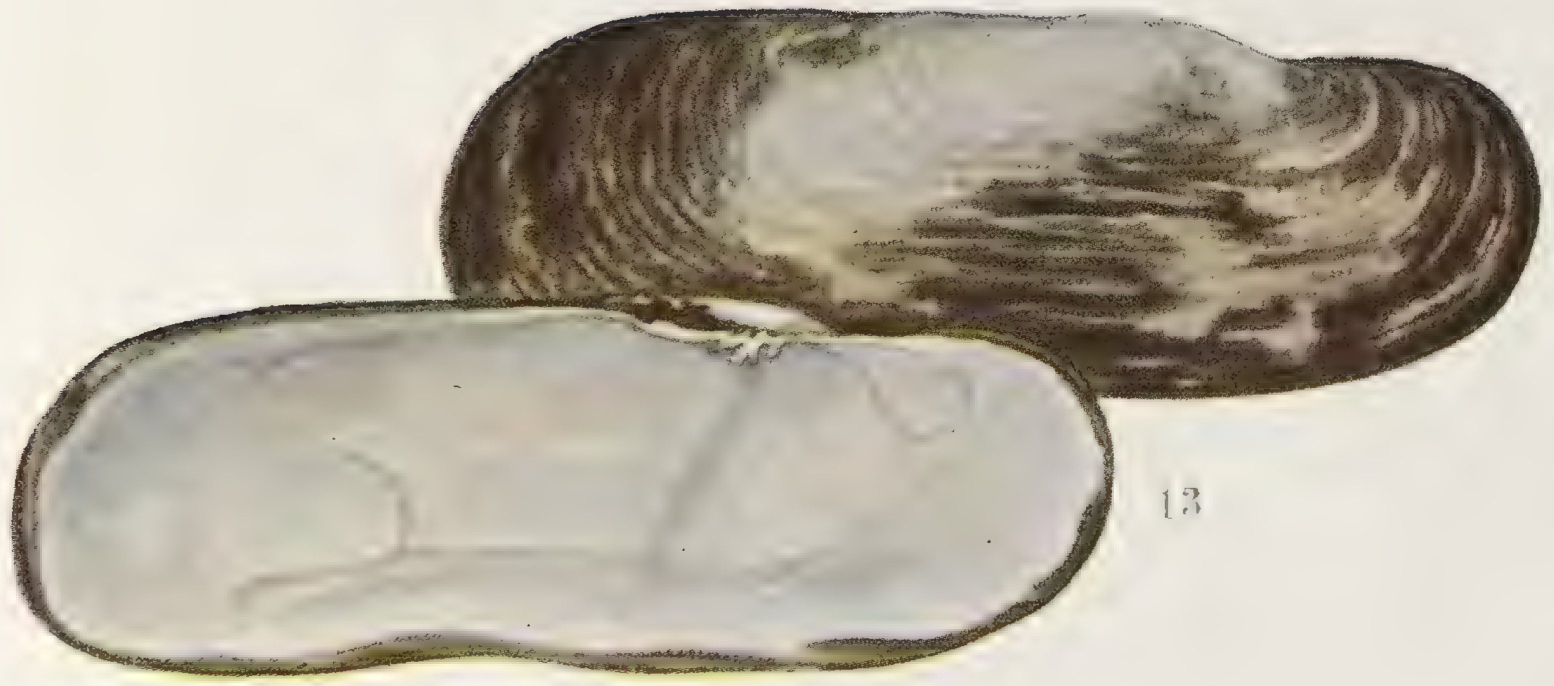

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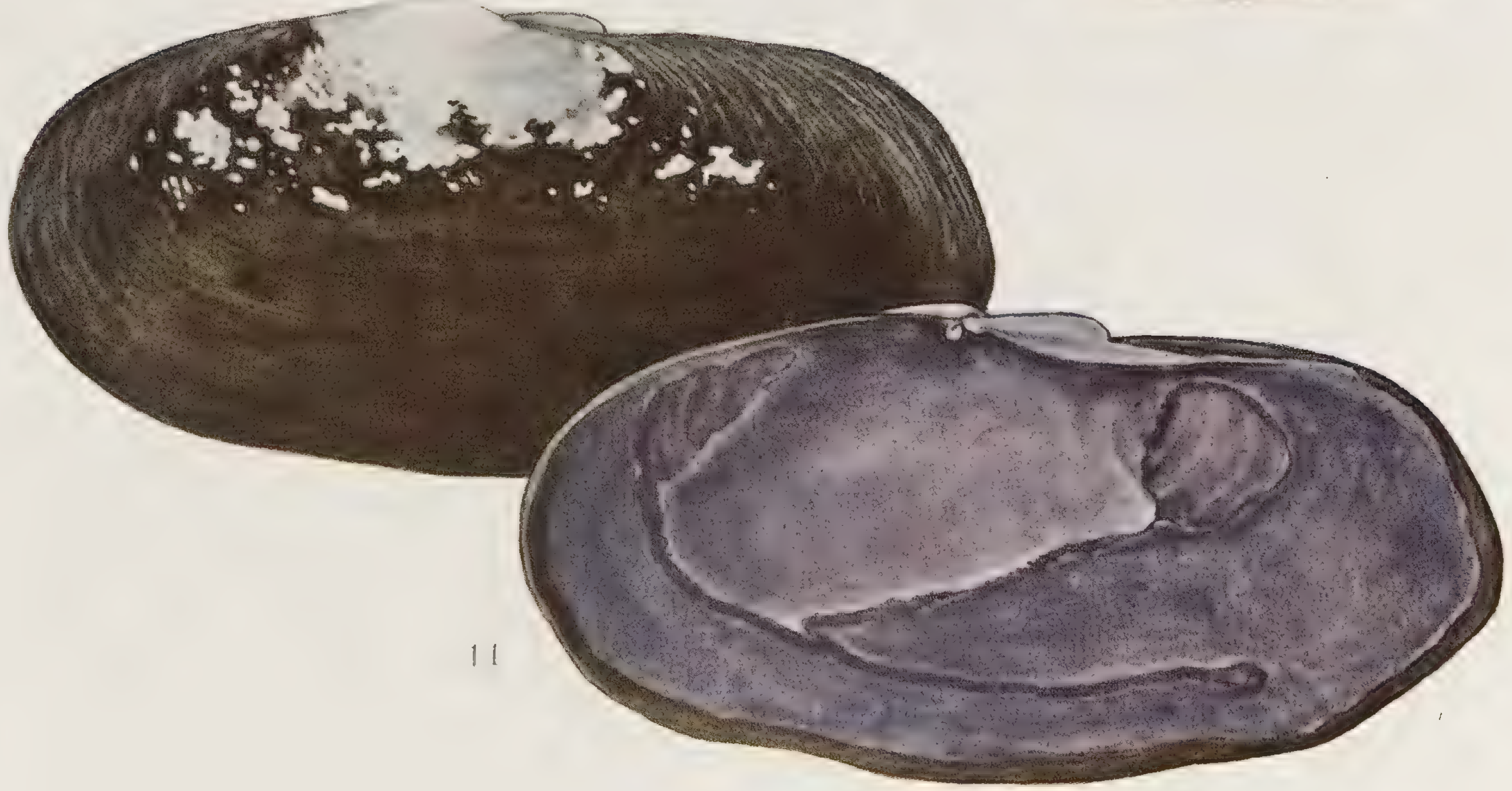


14

ババガゼ
Placiphorella *sp.*
（第九十一圖版　第一圖）　×1

形態は略圓形をなし板殼は幅廣し. 板殼は後端部のもの小なれど其表面は稍滑かにして聚合的成長線を觀る. 板殼周緣肉帶は前方幅廣く後方幅狹し. 背面の色彩桃色, 白色, 褐色, 綠色等を雜へ大小長短種々の棘狀突起を有す.

長 50 粍, 幅 43 粍. 本邦中部及南部の干潮時に露出せる岩礁上に着生す.

ニシキヒザラガヒ
Onithochiton hirasei *Pilsbry*
（第九十一圖版　第二圖）　×1

形は楕圓形を呈し, 板殼は滑にして美しき斑紋を有す. 背面は赤色及綠色の斑を雜へ頗る美麗なり. 腹面は淡肉色を呈し強く岩礁に密着す.

長 50 粍, 幅 30 粍位. 本邦中部及南部海岸の干滿潮間の海水の流通よき岩礁に着生す. 肉は地方に依りに食用とす.

ヒザラガヒ
Liolophura japonica *Lischke*
（第九十一圖版　第三圖）　×1

形態は長楕形を呈し, 板殼は厚く廣く中央部のみ平滑にして他は平滑ならず. 肉帶は白色, 褐色, 黑色などを彩り石灰質の小棒狀突起を有す.

長 50 粍, 幅 30 粍位. 分布甚だ廣く殆んど全國的に產す. 干滿潮線間の岩礁に着生する極めて普通なる種なり. 肉は地方的に食用とさる.

ヤスリヒザラガヒ
Ischinochiton coreanicus *Adams & Reeve*
（第九十一圖版　第四圖）　×1

形は長楕圓形にして, 板殼は黃褐色を呈し 8 枚を有す. 兩端板殼面は中央膨み粒狀を呈するも, 該兩端板殼間の板殼面は 16–17 條の縱線を有する中央部と, 粒狀を呈する側部とに分たる. 板殼の周緣には肉帶を有し濃綠色を呈し帶黃色の瓦狀細鱗を有す.

長 35 粍, 幅 21. 粍位. 本邦中部及南部海岸の岩礁下面に着生生活をなす.

ケハダヒザラガヒ
Acanthochitona dephilippi *Tapparone-Canebri*
（第九十一圖版　第五圖）　×1

形態は楕圓形を呈し, 板殼は小にして 8 枚有り. 板殼表面は黑褐色にして平滑なれど埋沒部は綠色を呈す. 肉帶は廣く綠橄色にして細毛を密生し, 板殼の兩側に沿ふて 9 對の白色絹絲樣の棘叢を有す.

長 33 粍, 幅 18 粍位. 分布甚だ廣く本邦中部より南部に亘りて多產し, 海岸の岩礁, 小石などに着生す.

ケムシヒザラガヒ
Cryptoplax japonica *Pilsbry*
（第九十一圖版　第六圖）　×1

體は延長して蠕蟲狀を呈し, 厚く肥大してなめし皮の如き觀あり. 板殼は退化し縱に長く離生す. 體色は暗褐色を呈し數條の褐色橫帶を繞らす.

長 50 粍, 幅 14 粍位. 本邦中部及南部海岸の岩礁間に棲息す.

オホエラウミウシ
Argus speciosa (*Abraham*)
（第九十一圖版　第七, 第八圖）　×1

動物體は扁平にして小判型を呈す. 背面は「チヨコレート」色の地に淡褐色の大斑を雜へ尙暗褐色及び周緣の白き褐色小斑散在す. 腹面は鮮黃色を呈し, 之に大小種々の丸き暗褐色斑を雜ふ. 背觸角は大きく其尖端部に約 40 の皺襞を有す. 鰓は大きく 6 葉よなる. 3 分岐式にして肛門の周圍に叢生す.

長 100 粍, 幅 50 粍位. 岩多き淺海に棲息し, 夏季の候產卵す. 本邦中部太平洋岸に產す.

タテジマウミウシ
Pleurophyllidia japonica *Elliot*
（第九十一圖版　第九圖）　×1

動物體は扁平舌狀を呈し頗る美麗なり. 即外套膜は黑地に淡黃色縱縞を有し, 頭部及び足部は帶紫黑色にして周緣は黃色を彩る. 鰓は體の後方外套膜の下にあり. 約 40 葉よりなる. 顎を有し 15 列の小齒を具ふ.

長 100 粍, 幅 40 粍位. 淺海の泥砂地に棲息し夏季の候產卵す.

フレリトゲアメフラシ
Aclesia freeri *Griffin*
（第九十一圖版　第十圖）　×1

動物體は長橢圓形にして背面に大小多くの樹狀突起を有す. 暗褐色の地に黑點を散布し尙背溝の兩側に沿ひて淡褐色の環を有する十數個の青色斑點を有す. 樹狀突起は淡褐色にしてその大なるものは頭部前觸角と眼との間にあるものなり.

長 90 粍, 幅 40 粍位に達し分布可成り廣く本邦中部以南に產し 八, 九月の候產卵す. 卵紐は綠色にして海素麵と稱し其乾製たるものは支那に輸出す.

タツナミガヒ
Dolabella sp.
（第九十一圖版　第十一圖）　×1

動物體は圓錐形を呈し體の後端には圓形の橫斷面を有す. 體の背面及び後端橫斷面には多くの葉狀突起を有し, 頭端には耳形の前觸角と其後方に圓筒狀の背觸角ありて何れも外側溝を有す. 體色は帶青紫褐色に淡色の大斑及多くの白點を雜ふるも, 體色は變化多く定かならず. 外套膜の中央には三角形の外套孔ありて白色手斧狀の貝殼を有す. 外套膜の上周緣並復緣は多腺にして紫液を分泌す.

長 120 粍, 幅 55 粍位. 六月中旬より 八月下旬に亘りて產卵す. 分布は廣きも 40 度以北には之を見ず. 2 米位の砂地或は岩底に棲息し「イバラノリ」を嗜食す.

Placiphorella *sp.*
"Babagaze"
Pl. XCI, fig. 1.　×1

Shell somewhat orbicularly ovate, valves very broad transversely and narrow longitudinally, posterior small valves rather smooth, concentrically lineated; lateral area very broad anteriorly, variegated with pink, white, brown and green; furnished with short bristles.

Attached on rocks of tidal shores along of central and southern Japan.

Onithochiton hirasei *Pilsbry*
"Nisiki-hizara-gai"
Pl. XCI, fig. 2.　×1

Shell elliptical, valves fine and smooth. Colour of dorsal very beutiful with red and green patches; ventral of foot is flesh colour.

Inhabits tidal rocky shores of central and southern Japan. Measures about 50 mm. in width;

Liolophura japonica *Lischke*
"Hizaragi"
Pl. XCI, fig. 3.　×1

Body elliptical, rather wide, valves broad transversely, not smooth except median line. The mantle contains numerous spicules of carbonate of lime, and is ornamented with white, green, brown, and black colours.

Widely distributed along all coasts of Japan, and most commonly inhabits tidal rocky shores. Its meat is used as food by local people.

Ischinochiton coreanicus *Adams & Reeve*
"Yasuri-hizara-gai"
PL. XCI, fig. 4.　×1

Shell ovate rather elevated, terminal valves and lateral areas of the rest radiately grooved, interstices convex, peculiarly grained, grains prominent, round, solitary, posterior terminal valve umbonated, extremity radiated, small, short; central areas longitudinally very finely granosely ridged, interstices between the grains yellowish, central areas yellowish brown.

Length about 35 mm.; inhabits tidal rocky shores of Honsyu and Kyusyu.

Acanthochitona dephilippi *Tapparone-Canebri*
"Kehada-hizaragai"
Pl. XCI, fig. 5.　×1

Shell oblong, eight valves small, smooth along the summit, very closely, finely striated on each side; green, ligament horny, ornamented with large dense tufts of white silky spiculae of nine pairs.

Widely distributed throughout central and southern Japan; inhabits tidal rocky shores.

Cryptoplax japonica *Pilsbry*
"Kemusi-hizaragai"
Pl. XCI, fig. 6.　×1

Body elongated, vermiform thick and fleshy, mostly tough and leathery, with reduced valves; valves longitudinally oblong, isolated.

Colour dark brown, with several brownish bands across the body. Length about 50 mm. long, 14 mm. in width. Inhabits rocky tidal shores of central and southern Japan.

Argus speciosa (*Abraham*)
"Ô-era-umiusi"
Pl. XCI, figs. 7, 8.　×1

The body compressed and elliptical in form; having very large branchiae and a wrinkled mantle edge. Colour of the dorsal is chocolate, diversified with bold mottlings of a lighter brown. There are also markings of other kinds; blotches of opaque white, small spots of dark brown, and ocelli occur only on the light mottlings. The under surface is of a fine clear yellow and bears on the mantle and sides of the foot bold and distinct spots, dark brown in colour and various in size. The rhinophores are large and bear about 40 brown perfoliation. Both the vas deferens and vagina are lined with a very thick muscular cuticle, thrown up into strong zigzag folds. Occurs along Pacific coast of central Japan, inhabiting shallow rocky shores, and breeding in summer.

Pleurophyllidia japonica *Elliot*
"Tatezima-umiusi"
Pl. XCI, fig. 9.　×1

The body tongue like forms; flattish and of an elegant shape; mantle is black with pale yellowish longitudinal lines; the head shiled and foot dark and purplish, margined with yellow. The anterior margin of the foot is produced into sharp angulate processes on either side. The transverse branchiae are thin and as preserved are white; they are about 40 in number but between the principal leaflets are other small ones.

The jaws bear about 15 rows of denticles. Appears on muddy bottoms and breeds in summer. Length of the body about 100 mm. and width 40 mm.

Aclesia freeri *Griffin*
"Hureri-toge-amehurasi"
Pl. XCI, fig. 10.　×1

Body short, fusiform, about 100 mm. in length, 45 mm. in width, with numerous smaller and larger branched processes on dorsal side, largest process situated between anterior tentacles and eyes. Doral tentacles roundish, anterior tentacles with numerous processes. Radula heart-shaped, with 64 teeth in each row.

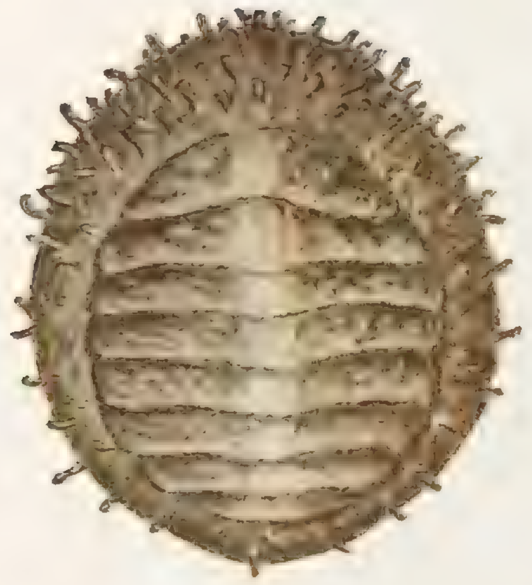
Body dark brownish in colour, with smaller black spots and larger circular brown spots which are bright bluish in centre; process light brown.

Breeds in August and September; egg-mass is long, thread-like, and greenish in colour. Inhahits shallow sandy or rocky bottoms; widely distributed along coasts of Japan.

Dolabella *sp.*
"Tatunamigai"
Pl. XCI, fig. 11.　×1

Body rather conical, about 140 mm. long, 76 mm. wide, with numerous lobed processes. Anterior ear-shaped tentacles are situated on the anterior end of head; dorsal tentacles cylindrical. Mouth small, on ventral side of head. Colour of the body purplish brown, with patches of lighter shades and numerous white spots. Hermaphroditic. Shell small, triangular, imbedded in dorsal part.

Breeds from June to August. Inhabits shallow sea bottoms; commonly occurs in central and southern Japan.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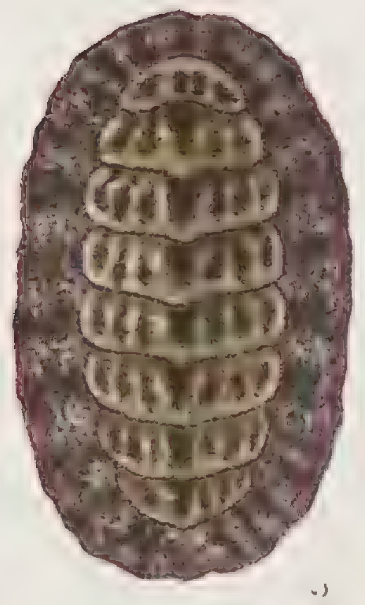
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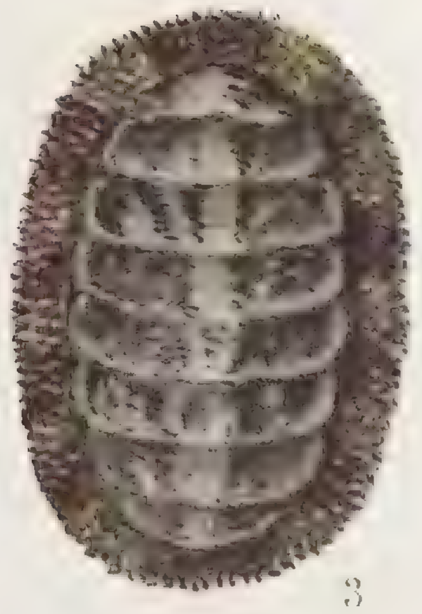
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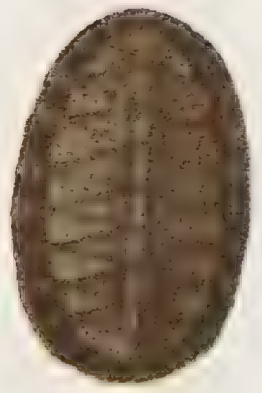
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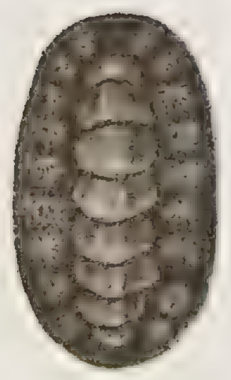
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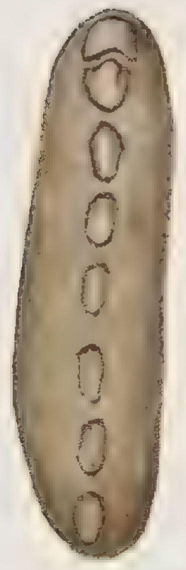
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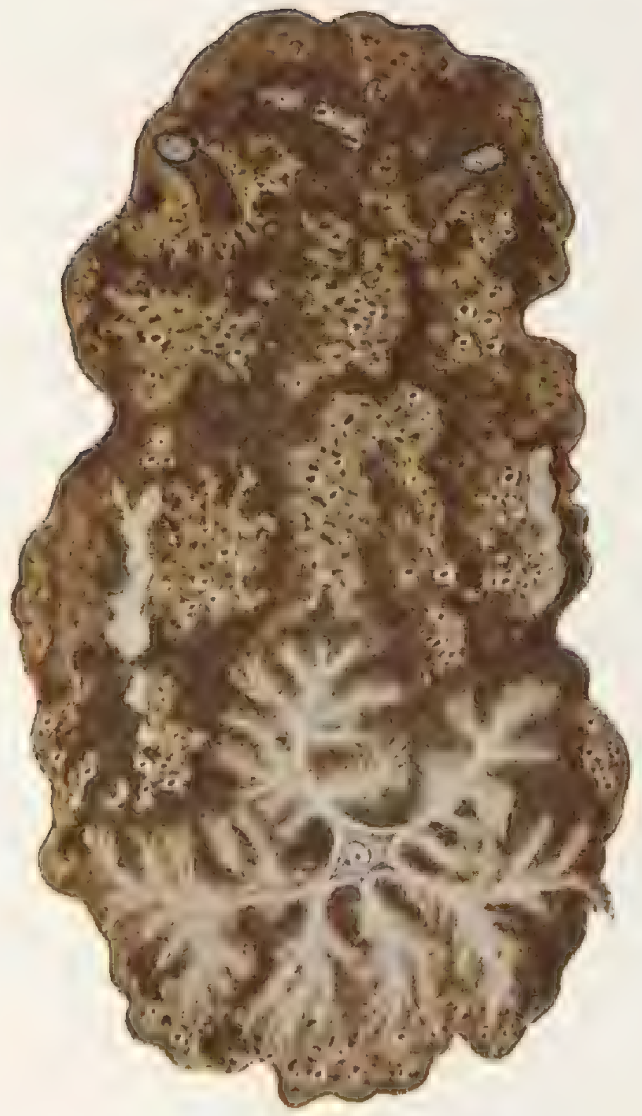
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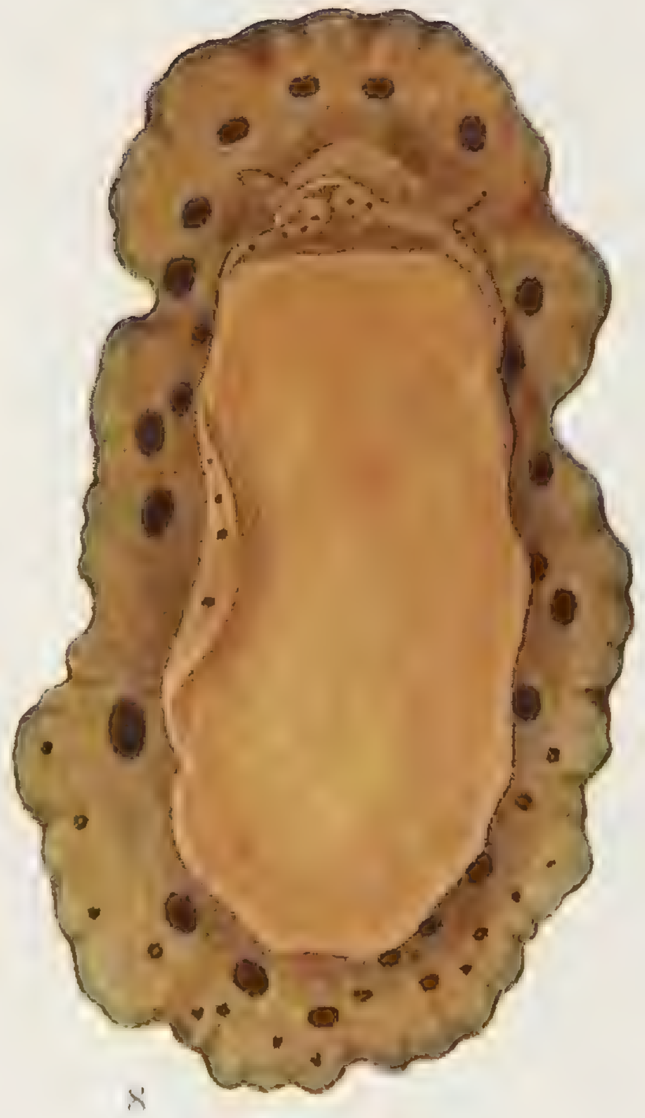
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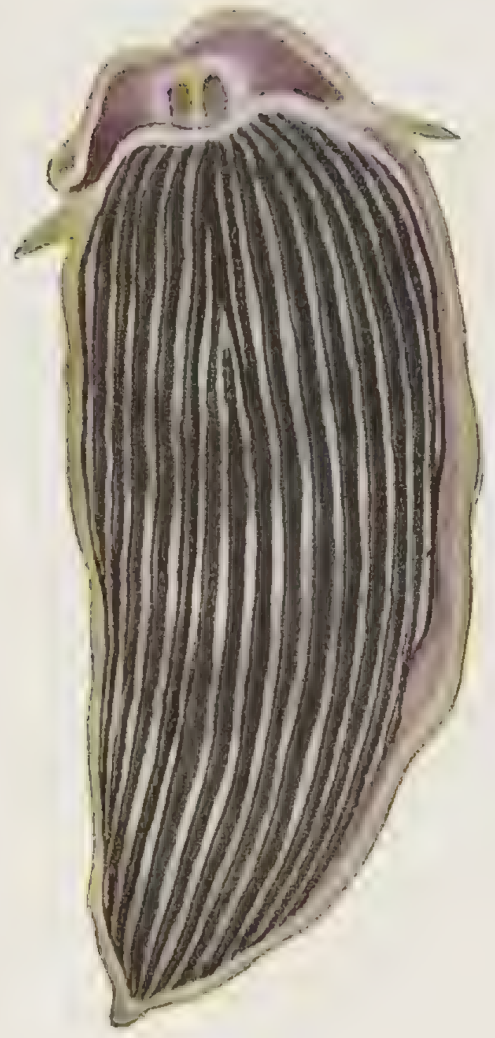
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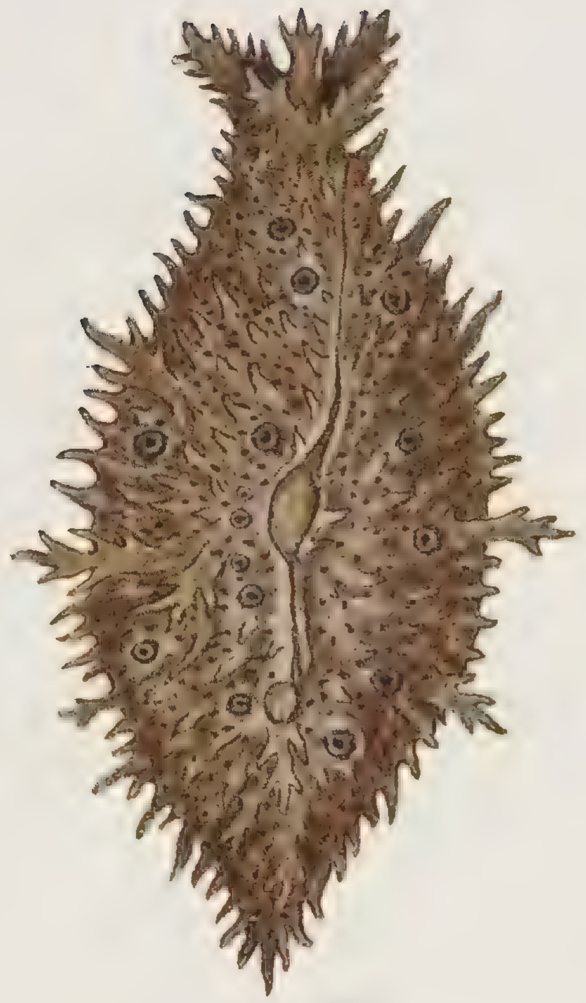
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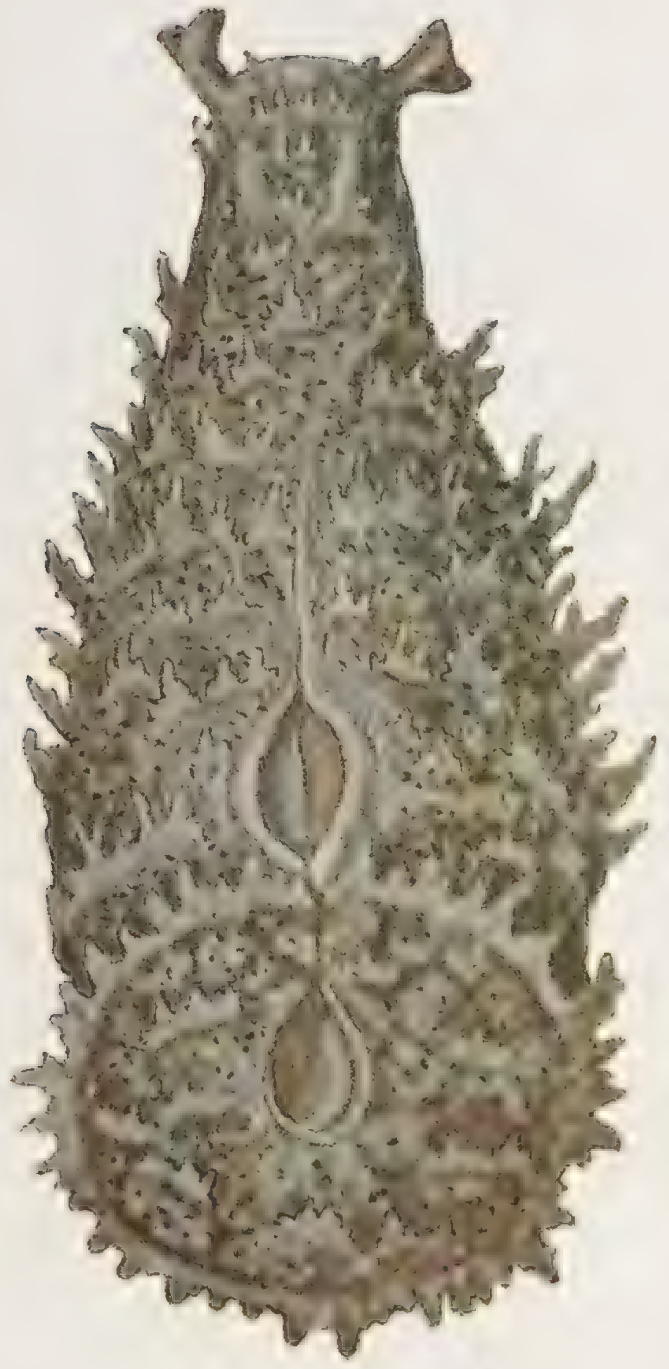
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コマホウヅキガヒ

Terebratella coreanica *Adams et Reeve*

（第九十二圖版　第一圖）　×1

體は二枚の貝殼にて被はる，縱徑40粍，橫徑45粍，背殼は稍淺く，腹殼は稍深く，蝶番にて相連り腹殼の嘴狀部にて岩石等に密着す．色は何れも紅色，緣に近き所は色濃く附着部に近づくに隨ひ黃色を呈す．殼面は一平面をなさず，大なる波狀に屈曲す．殼の外面は略ぼ平滑にして細かき成長線を示すのみ．本州の北部淺海に産す．

ホウヅキガヒ

Laqueus rubellus *Sowerby*

（第九十二圖版　第二圖）　×1

體は上下二枚の介殼により被はれ，外形普通の二枚貝に似たるも兩殼は左右に位置せず，背腹に位置す．共に稍々扁き卵形を呈し蝶番に依りて互に相關節す．縱徑28粍，橫徑20粍，厚さ14粍あり．殼の表面は略平滑黃色にして美麗なり．腹殼の一端は僅に嘴狀に伸ぶ，柄を以つて他物に固着して生活す．太平洋沿岸の深所に廣く分布す．

タテスジホウヅキガヒ

Waldeheimia grayi *Adams*

（第九十二圖版　第三圖）　×1

體は背腹二枚の貝殼にて被はる．縱徑30粍，厚さ18粍，背殼は略圓形にして淺く，腹殼は稍々深くして一方に嘴狀に延長せる部あり．その尖端にて他物に固着す．色は灰紅色，兩殼ともに外面には著しき並行せる縱溝あり．殼緣は略一平面をなす．此動物は柄によりて砂泥底に附着し，我國中部以北に産す．

シヤミセンガヒ

Lingula anatina *Lamarck*

（第九十二圖版　第四圖）　×1

體は長さ40乃至50粍，キチン質の殼により被はれ，肉質柱狀の柄を有す．殼は略々同形の背腹兩殼よりなり，蝶番を有せず，帶黃綠色にして表面は平滑なり．柄の色彩は淡褐なり．剛毛は兩殼緣より外方に向つて生ず．本種は其柄に依りて砂泥底に直立す．柄は鞘にて包まれ屢々砂の之に附着することあり．本種は地質時代のシルリヤ期のものと殆ど同形にして，計算に依れば約二千五百萬年を算ふ．分布廣く我國沿岸內灣砂泥底に棲息し，漁村にては之を肥料に供す．

イトメ（未成熟期）

Ceratocephale osawai *Izuka*

（第九十二圖版　第五，六，七圖）　×1

體形ゴカイに類似し，背腹に多少扁壓せられ，250乃至300個の環節よりなる．體長200乃至250粍，體幅3乃至4粍に達す．體の後半は前半に比し著しく細長し．背面前端は綠褐色なるも，中部以後は紅色又は黃紅色なり．眼は頸部背面に2對あり．幼時は發達不完全なるも成長後はレンズを生ず．疣足は概して同形にして上下兩枝に分れ，長短二種の剛毛を備ふ，內灣砂泥中に棲息し，10月，11月に至れば成熟し，體の前半は後部より切れ，水の表層に群泳し生殖を行ふ．此の游泳虫をバチ（第6，7圖）と云ひ，砂泥中にあるものをイトメと稱す．本種は我國內海砂泥底に棲息し東京灣に注入する河口に多し．

ゴカイ

Nereis japonica *Izuka*

（第九十二圖版　第八圖）　×1

體は稍々扁平にして環節は70乃至120個を數ふ．後端に至るに從ひ細まる．體長は90乃至120粍，體の前端頭部は2節より成り2對の小眼點と大小2對の觸角とを有す．口は頭部腹面に開孔す．頸部以下の各環節には剛毛を有する1對の疣足あるも，體の後端には之を缺き肛門鬚を備ふ．體色生時は背部淡紅色或は黃紅色にして，背面前端は黑褐色を呈す．本種は汽水の砂泥中に多く棲息し，東北地方より九州に至るまで廣く分布す．沿岸魚の釣餌として最良のものなり．

イムシ

Echiurus unicinctus *Von Drasche*

（第九十二圖版　第九圖）　×1

體は圓筒狀にして120粍に達す．口前葉良く發達して吻となり，口は吻の後部に位し，體の後部に肛門を開く，成體にては體節的構造は殆ど全くなく，唯體の表面に數多の乳嘴突起と口部及尾端にのみ痕跡的に剛毛を殘存するのみ．體色は生時に於て淡紅色又は黃褐色なり．內灣砂泥中に普通に産し分布廣く，鯛漁の釣餌として用ひらる．

ケヤリ

Laonome japonica *Marenz*

（第九十二圖版　第十圖）　×1

體は圓柱狀をなし砂泥の附着せる革質の鞘にて被はる．體色は褐紫色にして鞘は暗灰色なり．口節は口前葉と癒着し，口節は前方に突出し，襟狀環を繞らす．口の周圍には多數の鰓絲あり．此動物にして鰓絲を伸長展開するときは頗る美觀を呈す．胸部は9節より成る．本種は淺海底の岩礁間に着生す．

Terebratella coreanica *Adams et Reeve*

"Koma-hôduki-gai"

Pl. XCII, fig. 1.　×1

Body covered with calcareous bivalve shell. Valves of the shell, however, are situated on both dorsal and ventral portions instead of on lateral asin the bivalve molluscs. Longitudinal length of shell attains to 40 mm. Vertical length 45 mm. Dorsal valve rather flat; ventral valve deep; connected with each other by a hinge and attached to outer materials by peduncle of ventral valve.

Colour red, that of margin dark red, part of peduncle yellowish. Surface of shell not smooth. Growth-ring develops on outer surface of the shell.

This species is restricted to the shallow waters north of central Japan.

Laqueus rubellus *Sowerby*

"Hôduki-gai"

Pl. XCII. fig. 2.　×1

Body covered with dorsal and ventral valves, its external features seeming to resemble those of Pelecypoda The valves of the shell, however, are dorsal and ventral instead of lateral as in the mollusca bivalves.

Each of them is flat, oval in shape, and joined together by a hinge. Vertical length 20 mm. and longitudinal length 28 mm., depth 14 mm. Surface of shell is smooth. Colour is fine yellow.

Apical end of ventral valve projects like a beak, the mollusc is usually attached to other material by a peduncle.

This animal is widely distributed on deep sea bottom on Pacific coast of Japan.

Waldeheimia grayi *Adams.*

"Tatesudi-hôduki-gai"

Pl. XCII, fig. 3.　×1

Body covered with bivalves; longitudinal length 30 mm., depth 18 mm. Shape of dorsal valve somewhat spherical but shallow, ventral valve deep and elongated a little and like a beak in shape, colour reddish grey. Longitudinal grooves run parallel on surface of bivalves. Margin of valve almost flat.

This species is attached to sandy sea-bottoms by a peduncle and restricted to the north coast of central Japan.

Lingula anatina *Lamarck.*

"Syamisen-gai"

Pl. XCII, fig. 4.　×1

Body covered with cuticular shell; attains to 40-50 mm. in length, having a muscular columnar peduncle. Shell almost symmetrical in dorso-ventral without hinge. Colour of shell yellowish-green, its surface smoothish; colour of peduncle light gray. Setae grow outward from margin of both shells. Animal stands by peduncle on sandy mud bottom, this peduncle often being covered with a sheath, to which sand becomes attached. It is reported that Lingula are apparently the same to-day as they were in the Silurlan period, about twenty-five million years ago according to calculated date. The animal distributed very widely in the sandy mud bottom of Inland Sea of Japan, is collected for fertilizer everywhere in fishing villages.

Ceratocephale osawai *Izuka*

"Itome" (immature stage)

Pl. XCII, figs. 5, 6, 7.　×1

Shape of animal resembles that of "Gokai"; depressed more or less dorso-ventrally; composed of 250-300 body segments. Width reaches 3-4 mm. and length 200–250 mm. Posterior parts of body more slender than anterior half of body. Colour of anterior dorsal part greenish brown, but that of posterior parts from central portion of body red or yellowish red.

There are 2 pairs of eyes situated on dorsal side of peristome, but their construction is incomplete in immature stage; eye of adult has a lens.

On maturing in October and November, anterior half portion of body, separates from posterior portion, and rises to surface of the sea for reproductive processes. The animals at these stages are called "Bachi" (figs. 6. & 7.) but the immature ones are called "Itome" and live in sandy mud bottom.

This animal lives on the sandy mud bottom in the Inland Sea of Japan, being especially abundant in estuary of Tokyo Bay.

Nereis japonica *Izuka*

"Gokai"

Pl. XCII, fig. 8.　×1

Body rather flattened, composed of 70–120 body-segments, tapering gradually to posterior part. Body-length reaches 90-120 mm. Peristome composed of 2 segments, 2 pairs of eye spots, and 2 pairs of long or short tentacles.

Colour light-red or yellowish-red dorsally, but blackish brown on anterior dorsal portion

It lives on sandy mud bottom of blackish water, and is distributed widely from north-eastern region of Kyusyu.

It is one of the best baits for catching valuable coastal fish.

Echiurus unicinctus *von Drasche*

"Imusi"

Pl. XCII, fig. 9.　×1

Body cylindrical in shape, attains to 120 mm. in length. Prostomium well developed and becomes a grooved proboscis. Mouth situated at end of proboscis, anus opens at posterior end of body. In adult stage segmental construction of body vanishes, but papillae-like processes remain on body surface, and cirrus remains as a trace on both caudal and oral portions. Colour light-red or yellowish-brown.

It is abundant on sandy mud bottom of Inland sea and is distributed around the coast all over Japan. It is a very good bait for catching "Tai" (Pagrosomus major).

Laonome japonica *Marenz*

"Keyari"

Pl. XCII, fig. 10.　×1

Body cylindrical in shape, covered with leather-like sheath, attaching to sand and mud. Colour of body brownish-purple, the seath dark grey. Prostomiun united with peristomiun, projects in front and its terminal end has a collor-like ring. There are many branchial plumes around the mouth. When this animal spread out its branchial plumes, the appearance is beautiful. Thoracic part consists of nine segments.

This species inhabits shallow-waters, attaching itself to rocks.

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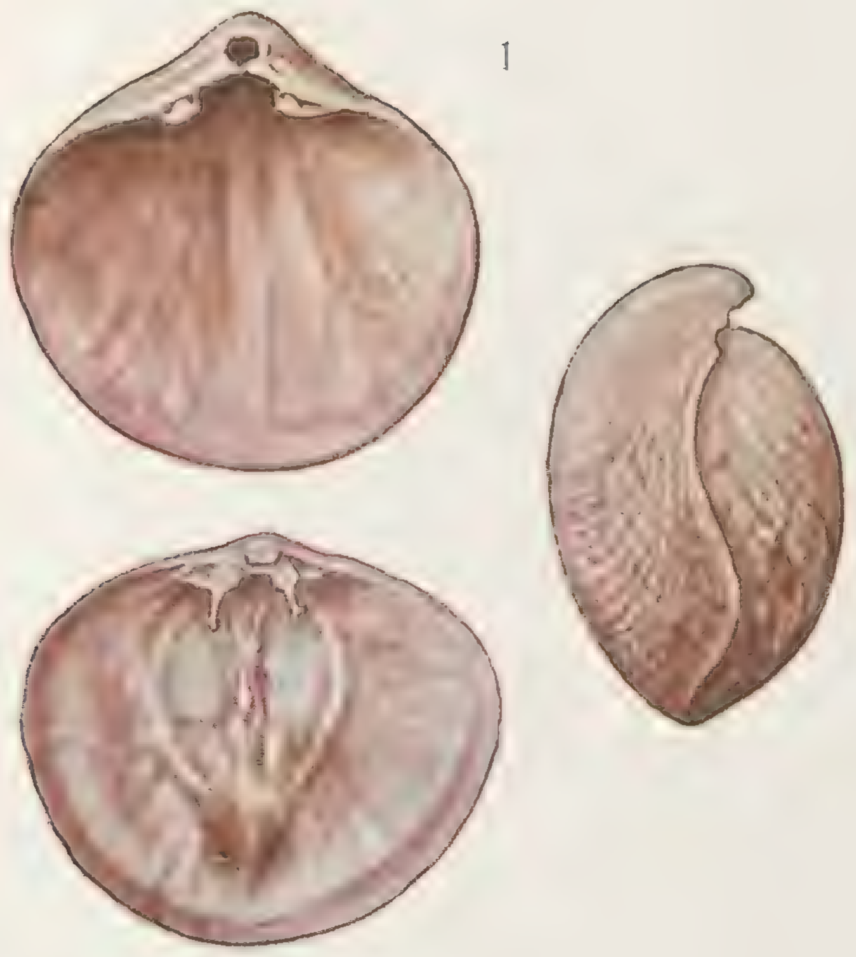

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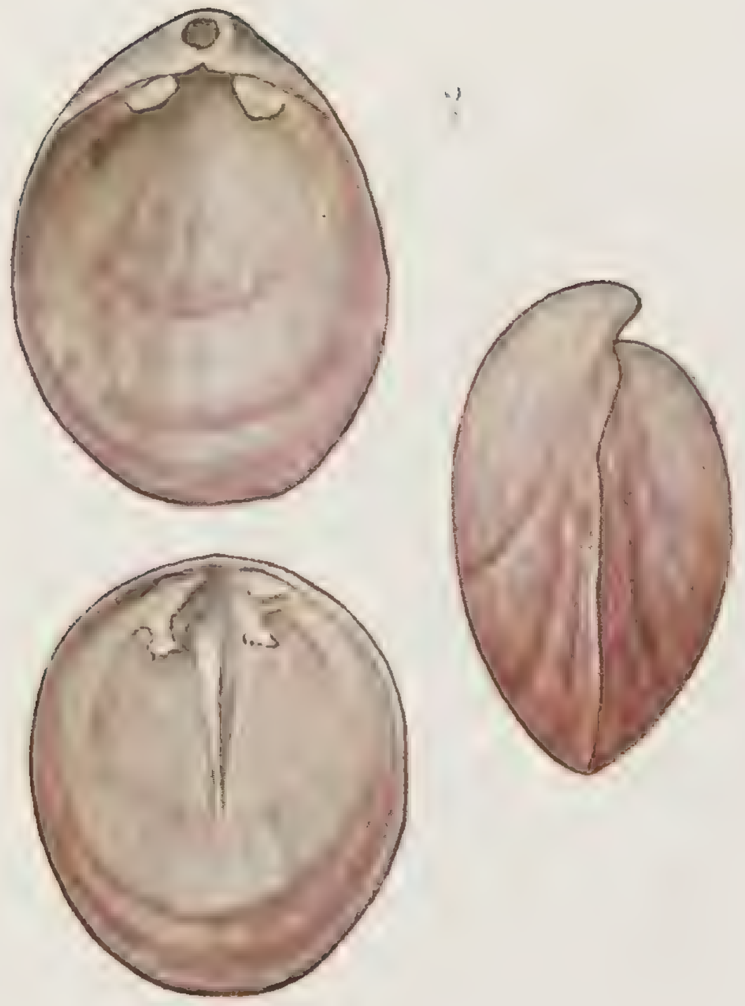

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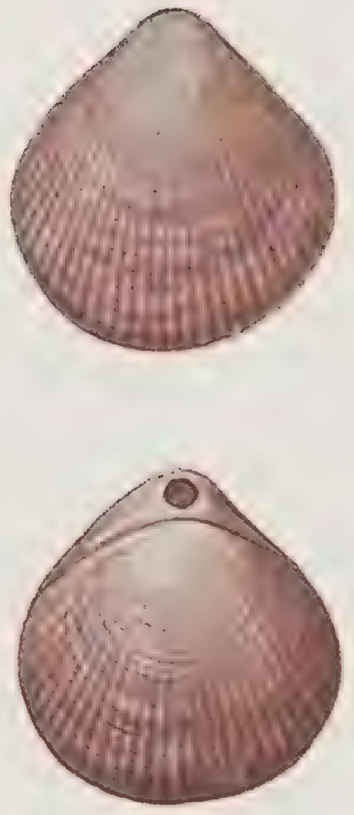

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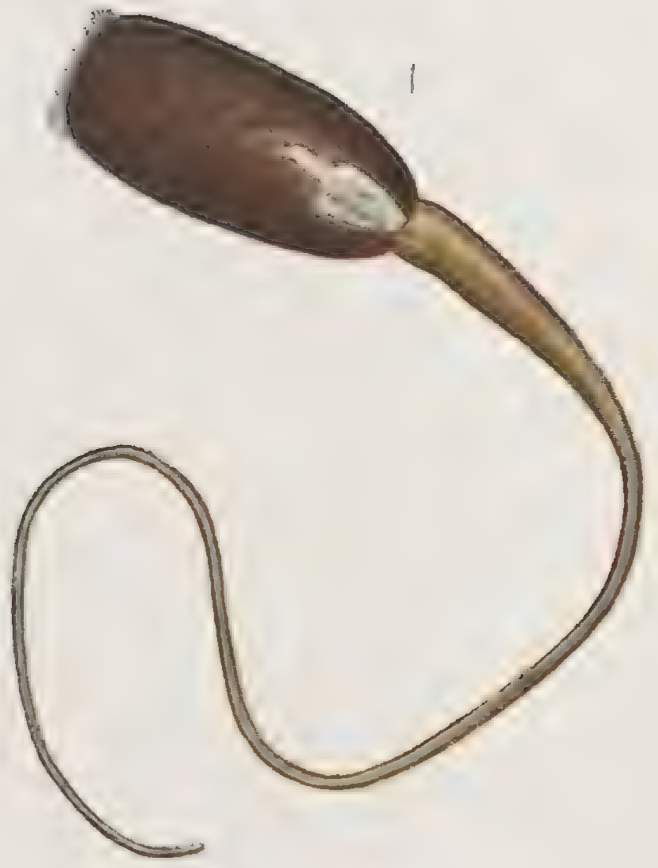

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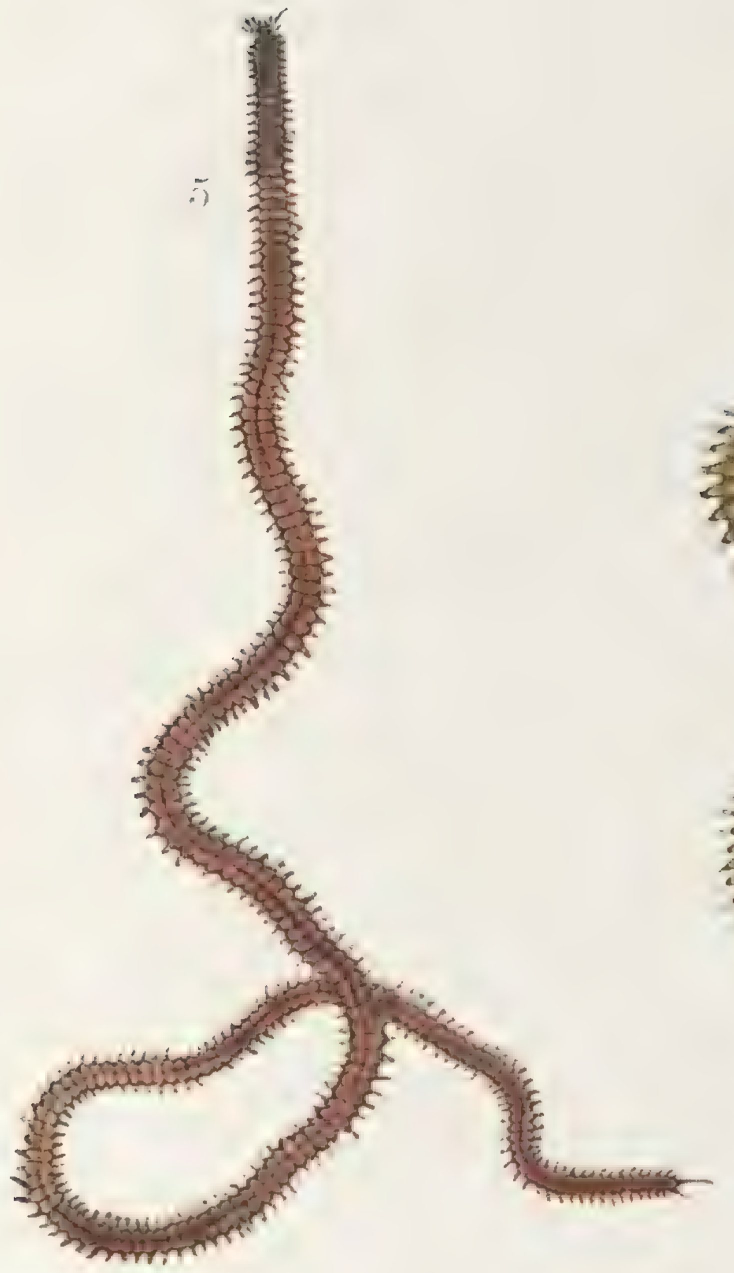

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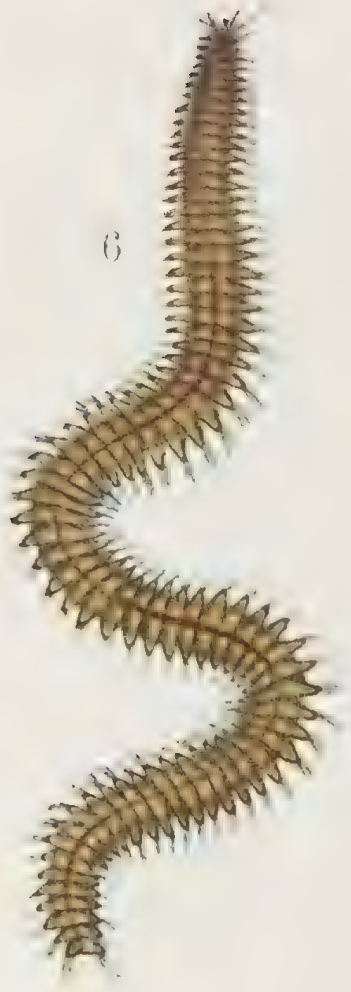

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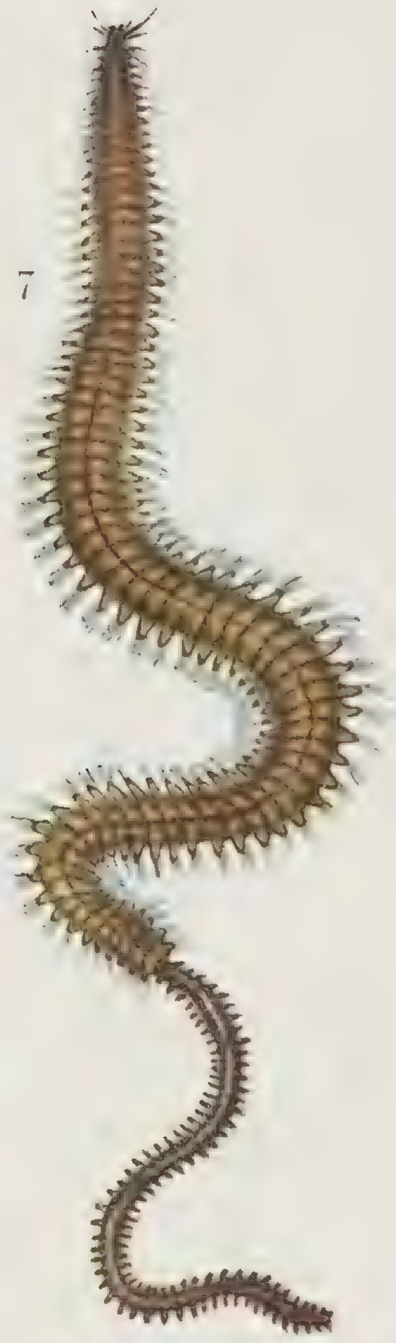

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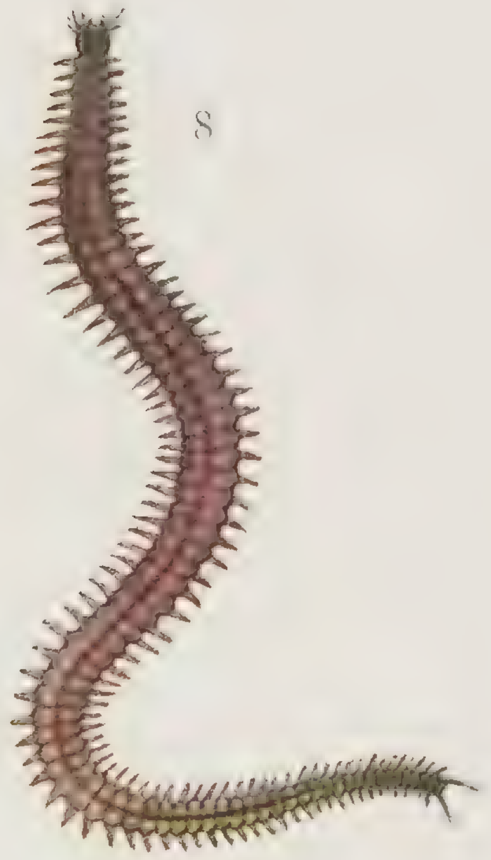

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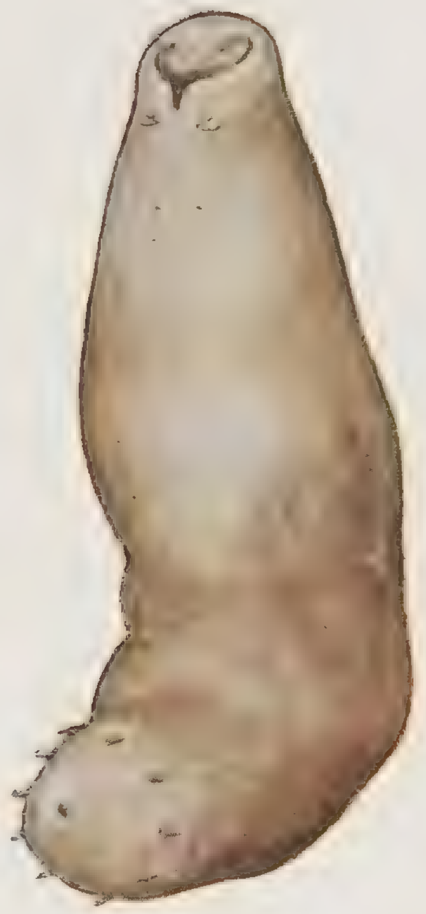

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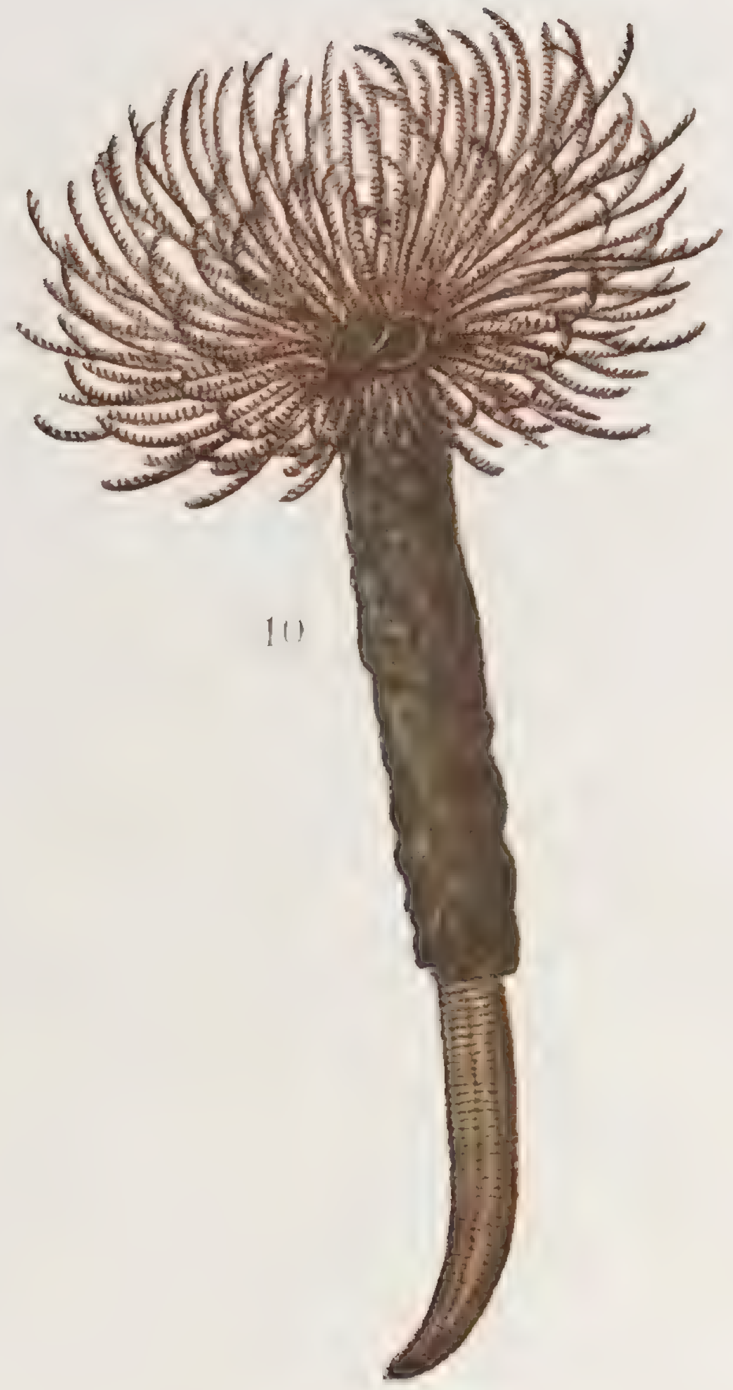


イソバナ

Melitodes flabellifera *Kückenthal*

（第九十三圖版　第一，二圖）　×1

群體は樹枝狀をなし概ね一平面上に擴がり，各枝は屢々相癒合せり．ポリプは小形にして黃色を呈し，多くは枝の側面にあり．膠質中に在る小骨片は角質を呈し，セメント樣の石灰質より結合せられ，堅固なる中軸骨骼となる．俗にクササンゴと稱し，色彩赤色，淡紅色或は黃色を呈す．我國暖流區域の沿岸岩礁に最も普通に棲息す．

ミドリイソギンチヤク

Cribrina artemisia *Mc Murrich*

（第九十三圖版　第三圖）　×1

體長 50 乃至 60 粍，口盤の直徑 50 粍，觸手の長さ內方のもの 35 粍，外方のもの 15 粍あり．體形圓筒狀にして 96 の疣列を有す．足盤は附着性にして圓盤狀をなす．時として體に砂及び介殼の小形のものを附着す．生時の色彩は足盤黃色，體壁上部は灰色，下部黃灰色，疣は暗綠色，觸手は淡黃色にして白點散在し 4 條の黑線あり，觸手の配列式は 6-6-12-24-48，總數 96 なり．此種は海岸砂地に埋もれて底部は岩石に附着し干潮線上にあり．相州三崎，青森縣，等の海岸に普通なり．

ヨロイイソギンチヤク

Anthopleura xanthagrammica (*Berkely*)

（第九十三圖版　第四圖）　×1

體長約 20 粍，足盤の直徑 40 粍，口盤の直徑 35 粍，觸手の長さ 20 粍あり．體は圓筒狀にして不等の長さに疣の縱列あり．上部の疣は殊に長く最上のものは分岐す．乳狀突起は 48 列，下部は吸盤となる．色彩は體壁淡黃色或は淡青色，口盤及觸手は黃灰色，緣邊の疣は常に白色なり．觸手は 6 の倍數にして尖端に孔あり．其配列式は 12-12-24-48，總數 96 に達す．此種は干潮線上の岩石に附着し相州三崎附近に普通に發見さる．

シロサンゴ

Corallium konojoi *Kishinouye*

（第九十三圖版　第五圖）　×$^{1}/_{2}$

シロサンゴはアカサンゴ，モモイロサンゴに比すれば淺所に棲息す．オートゾイドの直徑は大にして 2 乃至 3 粍に達す．ポリプは六放形にして骨軸の分枝は最も粗なり．生時は黃色又は赤色味を有するを以て他のサンゴと誤認し易し．其他の形態及び生態はアカサンゴ，モモイロサンゴに酷似す．

モモイロサンゴ

Corallium elatior *Ridley*

（第九十三圖版　第六圖）　×$^{1}/_{5}$

骨軸の先端は樹枝狀に分岐し，アカサンゴの如く密ならざるもシロサンゴに比すれば分岐多し．ポリプは六放形をなす．其他の構造は大略アカサンゴに似たり．但しオートゾイドの大さはアカサンゴよりも大にして 2 粍內外あり．分布狀態も亦アカサンゴと略ぼ同樣なれど稍々深所に棲息す．細工用として珍重せらる．

アカサンゴ

Corallium japonicum *Kishinouye*

（第九十三圖版　第七圖）　$^{1}/_{2}$

群體は樹枝狀にして堅き骨軸の外部に薄き外皮あり．外皮中には多數の珊瑚虫共存す．珊瑚虫にはアンソゾオイドとシホノゾオイドとあり．前者は營養を司り，後者は生殖細胞を造る．外皮中には亦突體と稱する物質あり．突體は珊瑚の種類に依りて異る．アカサンゴは八放形突體を主となす．分布は北緯 35° 乃至 45° の海底數十尋より數百尋の岩礁間に在り．其深さは種類に依りて異る．アカサンゴ，モヽイロサンゴ中アカサンゴは，其中位深度に棲息す．產地は從來土佐沖，肥前五島沖，薩摩沖なりしも近來小笠原，臺灣北部等の新漁場發見さる．珊瑚養殖は實驗的には可能なりとの報告あり．骨軸は堅く質密なるを以て細工物に用ひられ五寶物の一なり．

Melitodes flabellifera *Kückenthal*

"Iso-bana"

Pl. XCIII. fig. 1, 2.　×1

Cormus branch shape, being almost spread out on one plane, and all branches being connected with the others. Polyps small and of yellowish colour, attached on lateral branch. Spicules, imbedded in gelatinous substance, are horny and become a hard bone axis in connection with segmental materials such as a calcareous substance. Colour red, light red, or yellow. The animal lives on the rocky bottom in shallow parts of warm waters in Japan.

Cribrina artemisia *Mc Murrich*

"Midori-isogintyaku"

Pl. XCIII, fig. 3　×1

Body cylindrical in shape, length of body 5–6 mm. Diameter of oral disc reaches 5 mm. Arrangement of papillae is 96. The principal tentacles are 1.5 mm. in length, the accessory tentacles being 3.5 mm. Colour of pedal disc is yellow; upper portion of body is grey, lower portion yellowish grey, and papillae dark green. Tentacles are light yellow being dotted with white spots and lined with 4 black rays. Arrangement of tentacles is as follows; 6–6–12–34–48, total 96. The animal is attached to the coastal rock and its body is often covered with fine sand or shell. It is distributed in the area from the coast of Aomori to Misaki.

Anthopleura xanthagrammica (*Berkely*)

"Yoroi-isogintyaku"

Pl. XCIII, fig. 4　×1

Body short and cylindrical in shape and 20 mm. in length. Diameter of pedal disc 40 mm, diameter of oral disc 35 mm. and that of tentacle 20 mm. Unequal lengthened papillæ arranged in longitudinal rows, that of the upper portion being particularly long, and that of the uppermost portion of an branched and longest. Papillae are in 48 rows the lower one becoming a suctorial disc. Colour of mural layer is light yellow or light blue, and of oral disc and tentacles yellowish grey; marginal spherules are always white; number of tentacles is a multiple of six and their terminal ends pored. Form of arrangement is as follows; 12–12–24–48, total 96. This species is attached to rocks along the lower tidal mark, and is widely distributed.

Corallium konojoi *kishinouye*

"Siro-sango"

Pl. XCIII, fig. 5.　×$^{1}/_{2}$

Siro-sango lives at a shallower depth than Aka-sango or Momoiro-sango. Antho zooid is large in size, often growing to as much as 2-3 mm. in diameter. Polyp hexagonal. Branch of bone-axis very coarse. When taken out of the water, it assumes a yellowish or reddish colour, so that it is apt to be mistaken for other corals. In other morphological and biological respects it is nearly the same as "Aka-sango" and "Momoiro-sango."

Corallium elatior *Ridley*

"Momoiro-sango"

Pl. XCIII, fig. 6.　×$^{1}/_{5}$

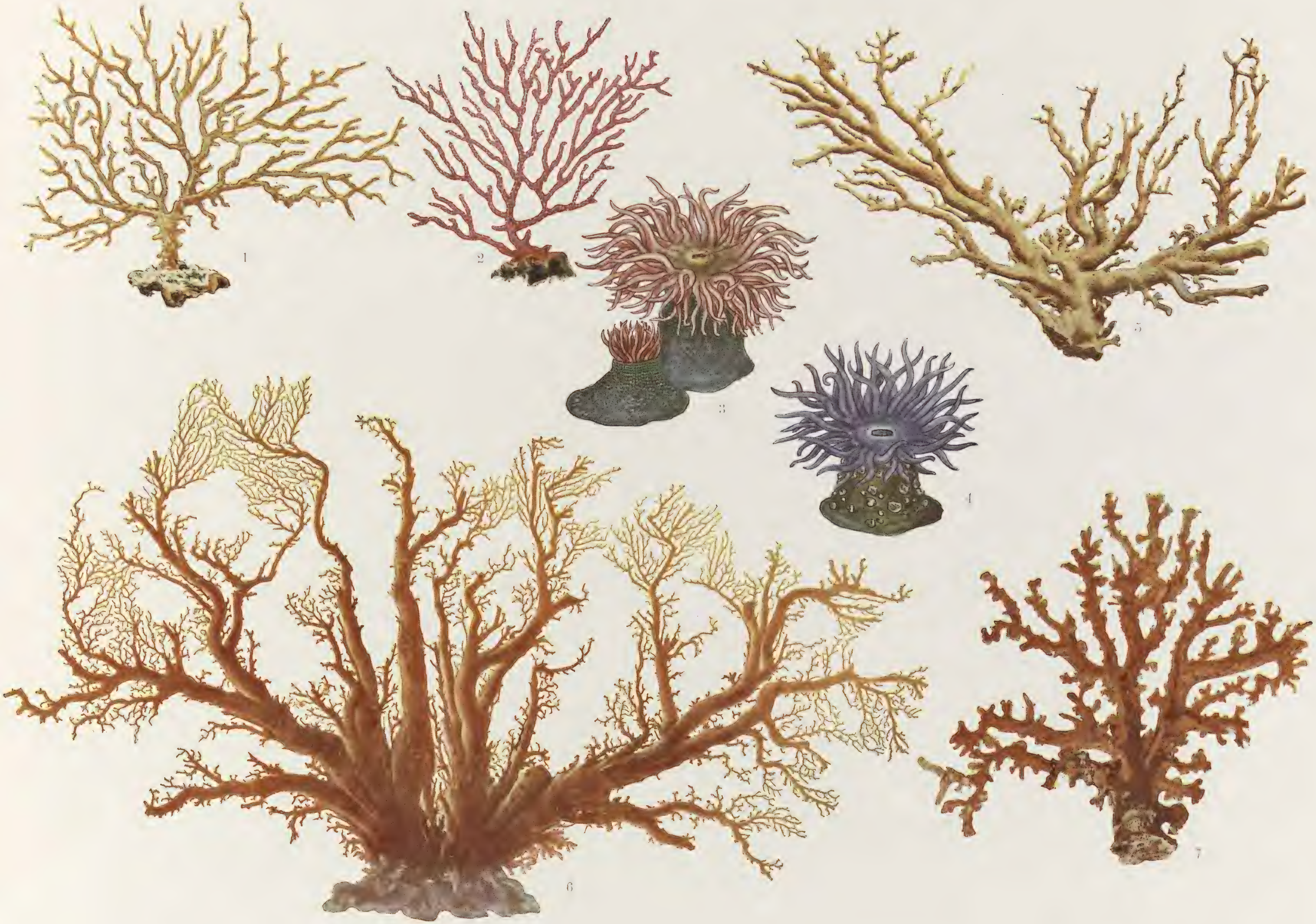
Terminal end of bone-axis more densely ramified than that of Siro-sango, but not like that of Aka-sango. Polyp hexagonal, its form almost the same as that of Aka-sango. Size of autozooid is 2 mm. larger than that of Aka-sango. Distribution of Momoiro-sango almost the same as that of Akasango, but a little deeper in abyssal area than the latter. Like Aka-sango, it is highly valued as material for fancy ware.

Corallium japonicum *Kishinouye*

"Aka-sango"

Pl. XCIII fig. 7.　×$^{1}/_{2}$

Colony branch-shaped; external parts of hard bone axis are covered with a thin external membrane and many zooids. Comprising the anthozooid and siphonozooid, live symbiotically in this membrane. Functions of anthozooid are for effecting nutrition and those of siphonozooid for the multiplying of the reproductive cell. There are octagonal polyp deposits in the external membrane. Its shapes are studied for the classification of these animals. This specimen is distributed on the rocky bottom of the sea from fifty or sixty to about hundred fathoms southwards of 35° 40′ north latitude, the distribution-depth of the coral varying according to the species. Aka-sango occupies an intermediate depth between Momoiro-sango and Siro-sango. Our fishing-ground is restricted to the area off the coasts of Tosa, Satuma and Hizen provinces, but about ten years ago fishing grounds were discovered off the east of Taiwan and off the west of the Bonin Islands. The culture of coral is reported to be experimentally successful. The bone axis is very hard and compact, being used for fancy goods and valued as one of the "Five precious substances."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Dactylometra pacifica (Goette)

"[illegible]"

Pl. XCIV, fig. 4.

[illegible] semi-spherical in [illegible] mm. in diameter. [illegible] from the centre of the [illegible] in different individuals. [illegible] brown, oral [illegible] divided [illegible] and 40–50 [illegible] [illegible] 4 in [illegible] with genital [illegible] The species is [illegible]

[illegible]

"[illegible]"

[illegible] coast of Japan. [illegible]

[illegible] A. Agassiz

"[illegible]"

Pl. XCIV, fig. [illegible]

[illegible] spherical [illegible] reaches 200 mm. [illegible] brown and [illegible] with yellow spots [illegible] owe their origin to the presence of [illegible] in the gelatinous substance of [illegible] arm composed of a [illegible] which is divided into small [illegible] branched [illegible] and on under [illegible] appendages. [illegible] almost equal to [illegible] The species appears in the bays of the Pacific coast of Japan from August to [illegible]

The [illegible] of the [illegible] India.

Rhopilema esculenta Kishinouye

"[illegible]"

Pl. XCIV, fig. 1.

[illegible] thick. The [illegible] numerous [illegible] and [illegible] 12 [illegible] and [illegible] the [illegible]

[illegible] under the [illegible] found [illegible] the animal [illegible] in [illegible] with [illegible] it is [illegible] in [illegible]

Pelagia [illegible]

"[illegible]"

Pl. XCIV, fig. 2.

[illegible] a number of [illegible] Length of [illegible] mm. in diameter. There is a [illegible] among these polyps which are composed of [illegible] with large tentacle [illegible]

[illegible]

"[illegible]"

[illegible]

[illegible]

ビゼンクラゲ

Rhopilema esculenta *Kishinouye*

（第九十四圖版　第一圖）　×1

傘は比較的固く，直徑450粍に達す．感覺器は8個にして其間に22個の緣瓣あり．口板なく口柱には8個の肩板あり．8個の口腕は三翼に分れ，各褶の間には棒狀附屬器を存す．色は青，觸手は乳白色なり．生殖器は馬蹄形にして中心柱の周圍に存在す．粘液物は生殖器下腔より生ず．冬期靜岡縣清水港附近に現はれ6月より8月には瀨戶内海或は九州地方に現はる．昔之を灰水にて洗ひ樫の葉にて壓を加へて保存し，後三盃酢にて食用に供せしが今日にては明礬水中に保存して支那料理の材料に用ふ．

カツヲノヱボシ

Physalia utriculus *Eschsch*

（第九十四圖版　第二圖）　×1

大形の烏帽子狀浮囊の下に多數の分業的個體ありて水中に懸垂す．浮囊は普通長徑50乃至60粍内外あり．ポリプは大なる口を有する營養個員，指狀個員，及び捕食のため刺胞を有する糸狀觸手を備ふ．生殖個員は發芽法に依つて兩性水母を生じ又敵に對し攻擊防禦共に之を行ふ，觸手を有するバストステイルあり．兩性水母は卵精造成機能を有す．體は美麗なる紫色或は青綠色を呈す．本種は我國暖海地方に多し．

アンドンクラゲ

Charybdea rastonii *Haacke*

（第九十四圖版　第三圖）　×1

傘は立方形をなし，四個の觸手腕は主軸的に傘の緣邊に生じ，同幅的に四個の觸手を有す．之等の觸手は極めて長く屢〻600粍の長さに達することあり．觸手基部は葉狀に扁平す．口柄は傘内にありて正方形の胃腔と連絡す．生殖器は葉狀をなし中間軸的に發達せり．生時は殆ど無色透明なり．盛夏より秋季に亘り本邦東海岸に多く出現し，日本海方面にも分布せり．

アカクラゲ

Dactylometra pacifica *Goette*

（第九十四圖版　第四圖）　×1

傘は半球形なり．直徑150粍以上に達することあり．外傘上の中心よりは放射狀に16條の褐色條紋あり．個體に依りて其數に變化あり．色彩は條紋及觸手に於いては濃褐色，口腕に於いては淡褐色なり．傘緣は46瓣に分れ8個の感覺器と40本の觸手を有す．尙本種の大形なるものは56本の觸手を有することあり．口腕は4個にして良く發達し中間軸に馬蹄狀をなせる生殖器を有す．觸手には烈毒を有す．我國近海に普通發見さるゝ種なり．

ミズクラゲ

Aurelia aurita *Lamarck*

（第九十四圖版　第五圖）　×1

傘は圓盤狀にして直徑300粍に達す．生殖器は褐色或は紫色にして放射管は稍〻青色，他は無色なり．傘緣は八部分に分れ各其境に感覺器あり．小形の觸手は傘緣の上方より一列に生ず．口腕は四本にして良く發達し中軸に溝あり．其溝の合する所に口を開く．生殖器は馬蹄形にして各中間軸に一個を有し，四個の生殖器下腔を有す．放射管は各正軸及中間軸の八本と各副軸の八本とは胃腔より出でゝ傘緣に至る．その中，正軸及中間軸より出ずるものは左右に3對の側枝を出し，是等の側枝は更に小枝に分枝して傘緣に達す．我國沿海至る所に產するも食用とならず．

タコクラゲ

Mastigias papua *L. Agassiz*

（第九十四圖版　第六圖）　×1

傘形は半球狀にして直徑200粍に達す．寒天質多く．色彩は濃褐色なり．又時には黃色の斑點を有すれども往々にして無色或は碧色のものあり．之卽ち共生藻類の一種が寒天質中に共生するがためなり．口腕は滑かなる上腕と小觸手，小附屬枝，等を有する下腕とに分れ，下腕の末端には棒狀の附屬肢を有す．附屬肢の長さは傘の直徑と略ほ等し．緣瓣は80に分たれ，8個の感覺器を備ふ．本種は8月，9月頃本邦太平洋岸の内灣に產し．印度，馬來等にも分布す．

Rhopilema esculenta *Kishinouye*

"Bizen-kurage"

Pl. XCIV, fig. 1.　×1

Umbrella comparatively tough, diameter often reaches 450 mm. Sense-organs number 8, among which are situated 22 marginal lappets. Oral plate wanting, but oral column has 8 scapular plates, 8 oral arms divided into 3 wings and each becomes a rod-like accessory organ between folds Colour deep blue, that of tentacles milky white Reproductive organs situated in horse shoe-form round the centre axis. Mucous substances issue from the cavities under the reproductive organs. In winter the species is found in the vicinity of Simizu Harbour near Sizuoka. From June to August they become visible in the inland sea of Seto and in the district of Kyusyu.

In ancient times this animal was used for food as "Sanbaidu" a kind of sauce after being cleaned with ashes and pressed down with oak leaves but now-a-days it is preserved in alum-water and used as a material in Chinese cookery.

Physalia uriculus *Eschsch*

"Katuwo-no-ebosi"

Pl. XCIV, fig. 2.　×1

Body consists of a float (*pneumatophore*) with a sail-like crest from which a number of polyps, hang into the water. Length of float is 50–60 mm. in diameter. There is a division of functions among these polyps, which are composed of a large gastrozooid with a large mouth, thread sine tentacle-bearing nematocysts for the ingestion of food, bastostyle for the production of sexual medusoids by budding, dactylozooid with tentacle for offense and defense against enemies, gonophore for the function of reproducting ova or spermatozoa. Colour fine purple or bluish green. It is abundant in the warmer seas in Japan.

Charybdea rastonii *Haacke*

"Andon-kurage"

Pl. XCIV, fig. 3.　×1

Umbrella cubical in form. 4 tentaculo-arms hang from margin of umbrella per-radially and also 4 long tentacles inter-radially, these tentacles being very long, often as long as 600 mm. Basal portion of these tentacles flattened like a leaf. Maneubreum, situated on inner side of umbrella, connected with a gastral cavity of square shape. Genital organ leaf-like in shape, developed interradially. Colourless and transparent. These animals are found on the eastern coast of Japan from summer to autumn, and are distributed in the Japan Sea.

Dactylometra pacifica *Goette*

"Aka-kurage"

Pl. XCIV, fig. 4.　×1

The umbrella formation is semi-spherical in shape, often attaining to 150 mm. in diameter. Sixteen streaks radiate from the centre of the umbrella, being varied in different individuals. Colour of streaks on tentacles dark brown, oral arms light brown. Margin of umbrella divided into 46 valves, with 8 sense-organs and 40–50 tentacles; tentacles provided with tentaculocyst, secreting poisonous fluids. Oral arms are 4 in number, well developed; provided with genital organ, horse-shoe like in form. This species is found everywhere around the coasts of Japan.

Aurelia aurita *Lamarck*

"Midu-kurage"

Pl. XCIV, fig. 5.　×1

Umbrella a spherical disc, diameter reaches 300 mm. Colour of genital organs brown or purple, that of radial canal blue; colourless in other parts. Margin of umbrella divided into 8 parts by 8 marginal lappets and 8 sense organs lie between these lappets 4 oral lobes long and grooved in their axes with folded margins, hang from the square mouth. Genital organs 8, horse shoe-like in form, each of them lying in each interaxis and opening out into a sub-genital pit.

Radial canals are composed of adradial, inter-radial and perradial canals branch laterally on both sides, all of them lead from the stomach to a circumferential canal at the margin. Species found every where on the coast of Japan. Not used for food.

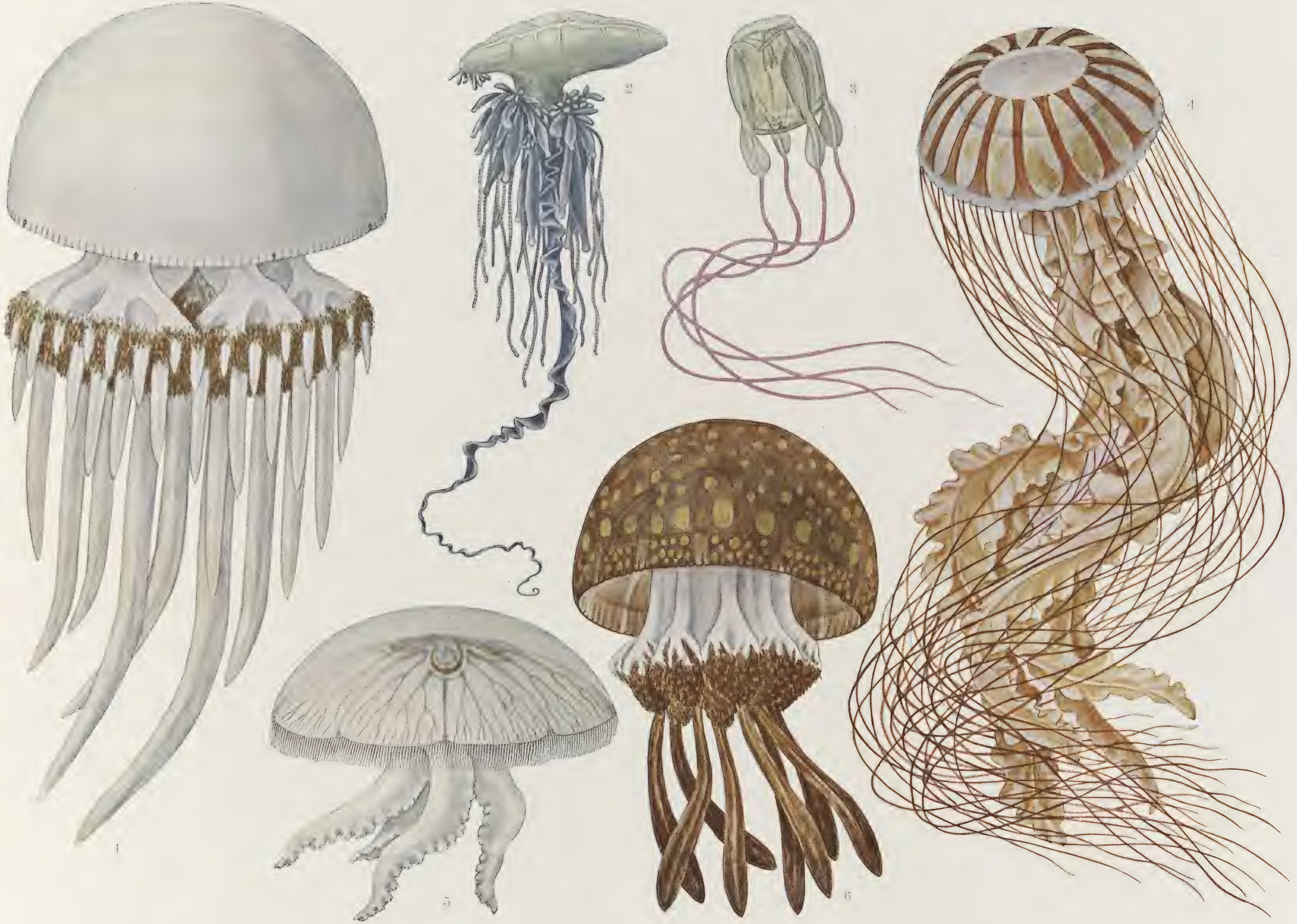
Mastigias papua *L. Agassiz*

"Tako-kurage"

Pl. XCIV, fig. 6.　×1

Umbrella semi-spherical, diameter reaches 200 mm., body dark-brown and dotted with yellow spots, but is often blue or colourless owgin to the presence of parasites of algae in the gelatinous substance of it. Oral arm composed of a smooth upper part which is divided into small tentacles and branched appendages and an under part which terminates in a rod-like appendicular process. Length of oral arm almost equal to diameter of umbrella. Marginal lappets 80. ense organs 8. This species appears in the bays of the Pacific coast of Japan from August to September.

The Distribution of the species extends to Malay and India.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ホツスガヒ

Hyalonema sieboldi *Gray*

（第九十五圖版　第一圖）　×½

體は槌狀をなし，上面には扁平の篩狀板ありて體の內腔を蓋ふ．下部は幾分狹ばまり下面中央部には長く捩れたる硅質束絲の柄を出し，之によりて海底に樹立す．此硅絲把束の上部には普通パリツウアご稱する珊瑚虫共生す．體壁は大小數種の骨片によりて構成せられ其中に必ず兩盤體を有す．本種は淡黄色を呈し相模灘の稍深所に生活す．

グミカイメン

Tethya japonica (*Lampe*)

（第九十五圖版　第二圖）　×1

體は楕圓形をなし．長さ7.5–35粍，幅3.5–21粍あり．頂端には一個の圓形の口開き下端には硅絲の把束あり．色は白色乃至灰黄色なり．前記の口より入れば短き大流出溝あり，其の端は4乃至10本の放射狀に走れる流出溝に分れ，それ等は又細枝に分れ鞭毛室に達す．骨片は三叉體にして互に分離す．其の長さ長短あり．三崎沿岸等の淺所に產す．

クロイソカイメン

Reniera okadai *Kadota*

（第九十五圖版　第三圖）　×1

外形不規則にして粗なり．表面に5乃至10個位の管狀突出部あり．其の先端に直徑1–2粍の圓形の口開き小火山の如し．體色は生時黑色又は灰黑色なるがアルコール中にては褪色す．骨片は海綿質に依り膠着相連接して三角形，四角形，多角形の種々なる網目狀を形成す．其の主なるものは桿狀體にして兩端著しく尖り眞直なるもの，或は屈曲せるものあり．本邦至る所の磯礁に多產す．

ヤマトカイロウドウケツ

Euplectella imperialis *Ijima*

（第九十五圖版　第四圖）　×1

體は圓筒狀にして僅か彎曲し，後端に至るに從ひ次第に細まり，其先端には根毛あり，之に依りて海底砂底中に體を支持す．上面は篩狀板にて覆はれたる口を有し其周圍には薄き鍔あり．體壁は硅質性の六放星骨片を有す．內腔中には一双の小蝦（スポンジコラ，インペリアリス）の共棲するものあり．本種は淡黄色にして相模灘，駿河灣等の深所に棲息す．

オウエンカイロウドウケツ

Euplectella oweni *Herklots & Marshall*

（第九十五圖版　第五圖）　×1

體は圓筒狀，殆ご同幅なり．體の上端には半球狀に膨出せる篩狀板ありて口を覆へり．鍔は顯著ならず．下端の根毛によりて他物に附着す．體長は根毛を除き200–300粍，幅20—50粍あり．廣き胃腔ありて中にスポンジコラ，ベヌースタの一双共棲す．朝鮮海峽，九州の北西海に產す．

ツボシメジカイメン

Grantessa shimeji *Hozawa*

（第九十五圖版　第六圖）　×1

體は半球形をなす．群體は平滑なる小壺狀個體の密集よりなる．壺狀個體の先端は開口するも，盲狀のものを混ふるこごあり．骨片は桿狀體，三輻體，四輻體にして炭酸石灰を多分に含む，夫々皮層，鞭毛室層，胃層を支持す．體色は白色或は灰白色なり．本種は相模，志摩，大島等の淺海岩礁に多く產す．

モクヨクカイメン

Euspongia iregularis *Lendenfeld*

（第九十五圖版　第七，八圖）　×1

體は塊狀をなし，表面には小突起ありて粗鬆なり．所々に口を開く．色彩は灰黄，褐色，黑色等種々あり．內部には數多の孔及溝あり．多くの楕圓形鞭毛室は寒天物質中に埋沒し流入流出兩溝に連結す．本種は熱帶，亞熱帶の海に多く我國にては臺灣，琉球の海岸に分布す．

Hyalonema sieboldi *Gray*

"Hossu-gai"

Pl. XCV, fig. 1.　×½

Body mallet-shaped, its upper side flattened and gastral cavity covered with a sieve plate. Lower side of body rather narrowed and resting on sea bottom by a knot of long twisted fibres of silicon which extends from the lower central portion of body. *Palythoa*, being one of the Anthozoa, is found attached to the upper portion of this fibre knot at joint of body. Body wall constructed with various spicules, especially with amphidisc. Colour light yellow. Lives more or less on deep sea bottom of Sagami boy.

Tethya japonica (*Lampe*)

"Gumi-kaimen"

Pl. XCV, fig. 2.　×1

Shape elliptical, length 7.5–35 mm. width 3.5–21 mm. Osculum opens on upper side. A bundle of silicious thread issues from under side. Colour white or yellowish grey. Behind osculum is a short large excurrent canal, this dividing and again into from four to ten smaller canals; finally these canals open into a flagellated chamber. Spicules are triaene each being separated from the other. These vary very much in length.

This species is restricted to the shallw waters at Misaki.

Reniera okadai *Kadota*

"Kuroiso-Kaimen"

Pl. XCV, fig. 3.　×1

Shape of body irregular, surface rough; from 5-to tube-like processes, project from the surface, on each terminal end of which open osculur pores. Colour black and blackish-grey, but fades in alcohol. Spicules attached to each other by spongin, becoming complex and varying in form. Rhabdus pointed at both ends but not always so often curved. This species lives on rocky bottoms everywhere in Japan.

Euplectella imperialis *Ijima*

"Yamato-kairodoketu"

Pl. XCV, fig. 4.　×1

Body cylindrical in shape, curved a little and narrowing gradually to the posterior end. Attached to sandy mud bottom of the sea by a root of tangled fibres, growing at terminal end. Mouth covered with sieve-like plate on upper side of body, and surrounded by a thin sword-guard-like accessory. Body wall consists of net-work, containing spicules of triaxon of silicon. Gastral cavity broad in which a pair of small crabs (*Spongicola imperialis*) lives symbiotically.

It is called "Venus' flower-basket" by Foreigners. Colour light yellow. Noted for being found in abundance on deep sea bottom of Sagami and Suruga bays.

Euplectella oweni *Harklots & Marshall*

"Oen-kairodoketu"

Pl. XCV, fig. 5.　×1.

Body elongated cylindrically, almost equal in diameter in every direction. Osculum covered with shieb-plate; elevated semi-spherically, parietal edge being indestinct. Anchored to sea bottom by a tuft of basalia. Body-length 200–300 mm. without basalia. Width 20–50 mm. Gastral cavity broad. *Spongicola venusta* live in pairs in this species.

It is restricted to the north-western sea of Kyusyu, and the Tyosen straits.

Grantessa shimeji *Hozawa*

"Tubo-simezi-kaimen"

Pl. XCV, fig. 6.　×1

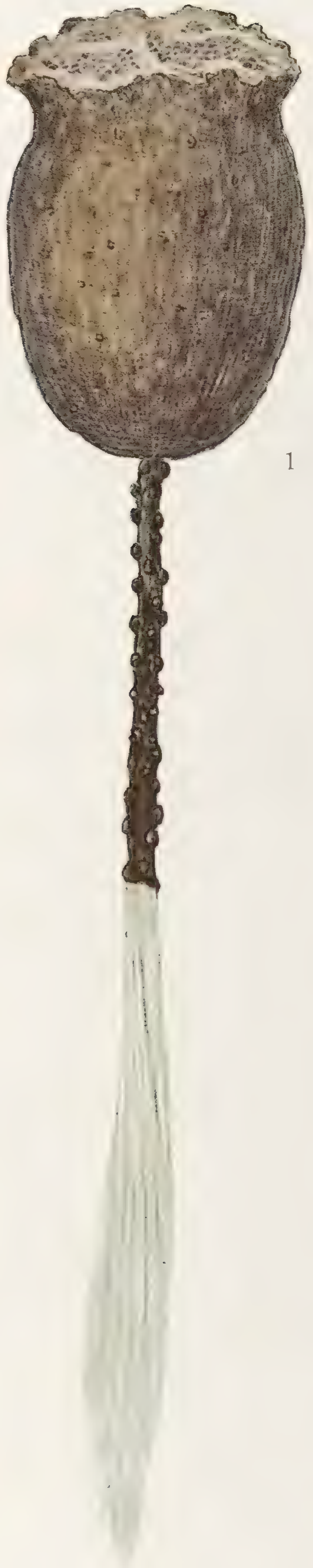
Body semi-spherical in shape, colony being composed of zooids of pot-like shape. Osculum of each zooid open or shut. Spicules composed of calcareous substance are classified into rhabdus, triradiate, quadriradiate, and support the dermal layer, layer of flagellated chamber, and gastral layer. Colour of body white or greyish white. Animal is distributed abundantly on rock-bottom of shallow water off Sagami and Sima provinces and Osima island.

Euspongia irregularis *Lendenfeld*

"Mokuyoku-kaimen"

Pl. XCV, figs. 7–8.　×1

Body massive, varied in shape; surface is rough, projecting with small processes, and osculum pores all over the surface. Colour yellowish-grey, brown, black etc. Internal part is perforated by many of pores and canals, with numerous elliptical flagellated chambers imbedded in gelatinous substance, connected by in- and ex-current canals. This species lives in tropical and sub-tropical waters, and it is distributed on the coasts of Taiwan and Ryukyu.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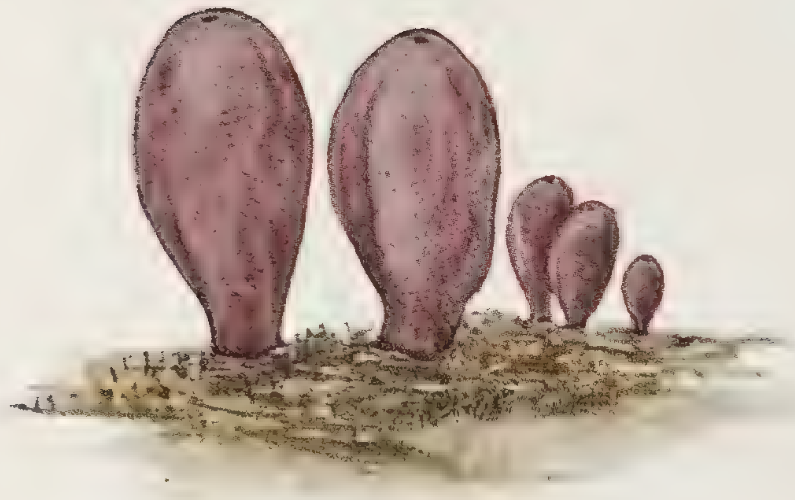
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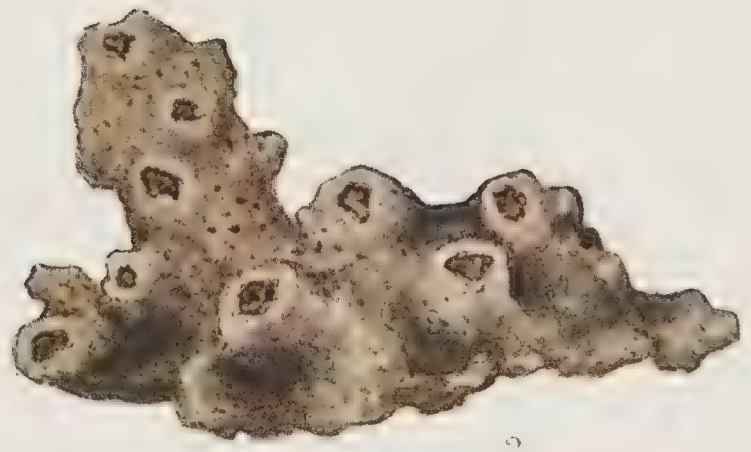
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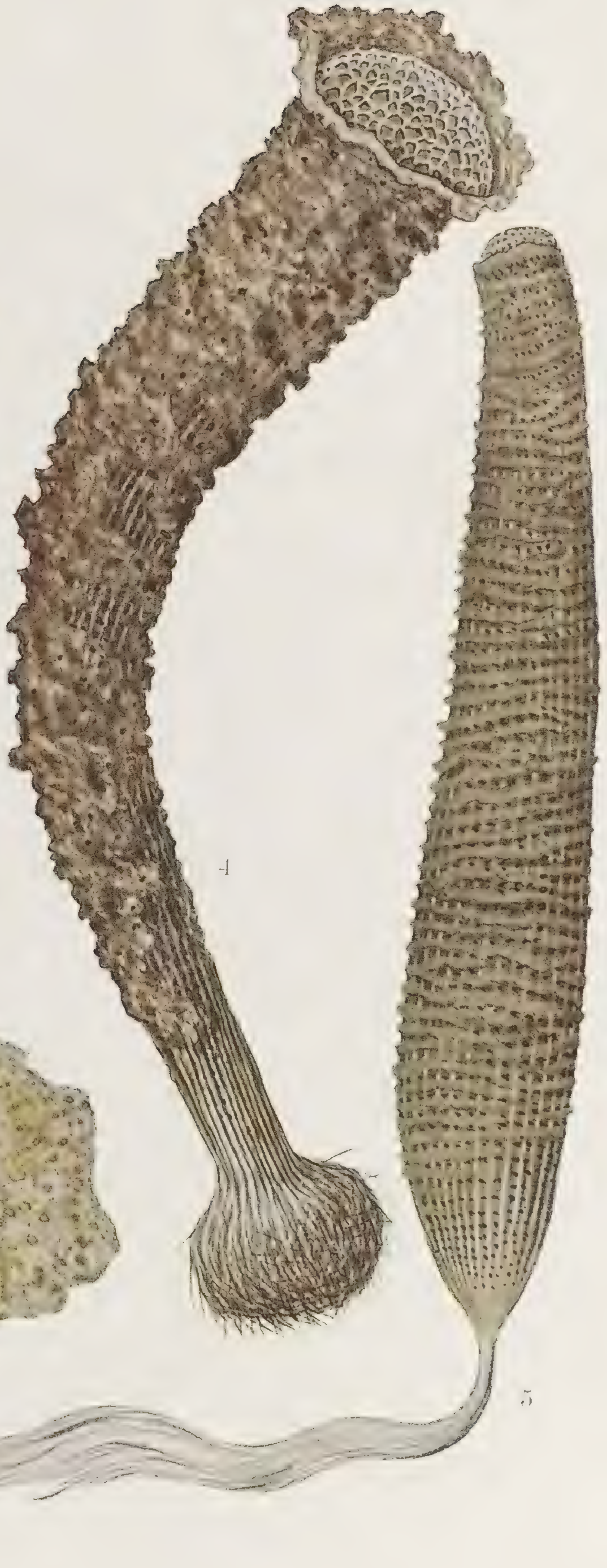
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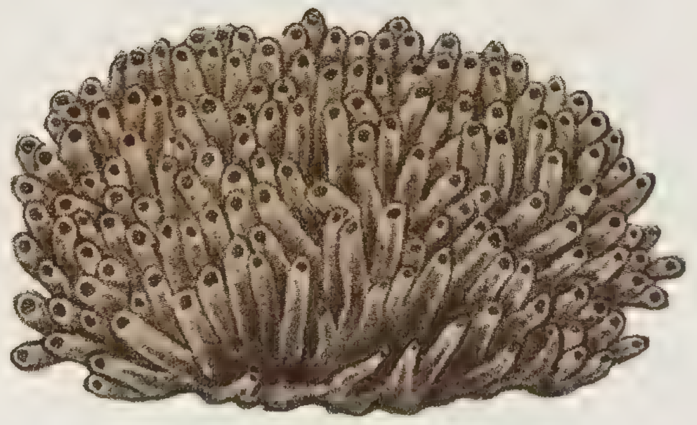
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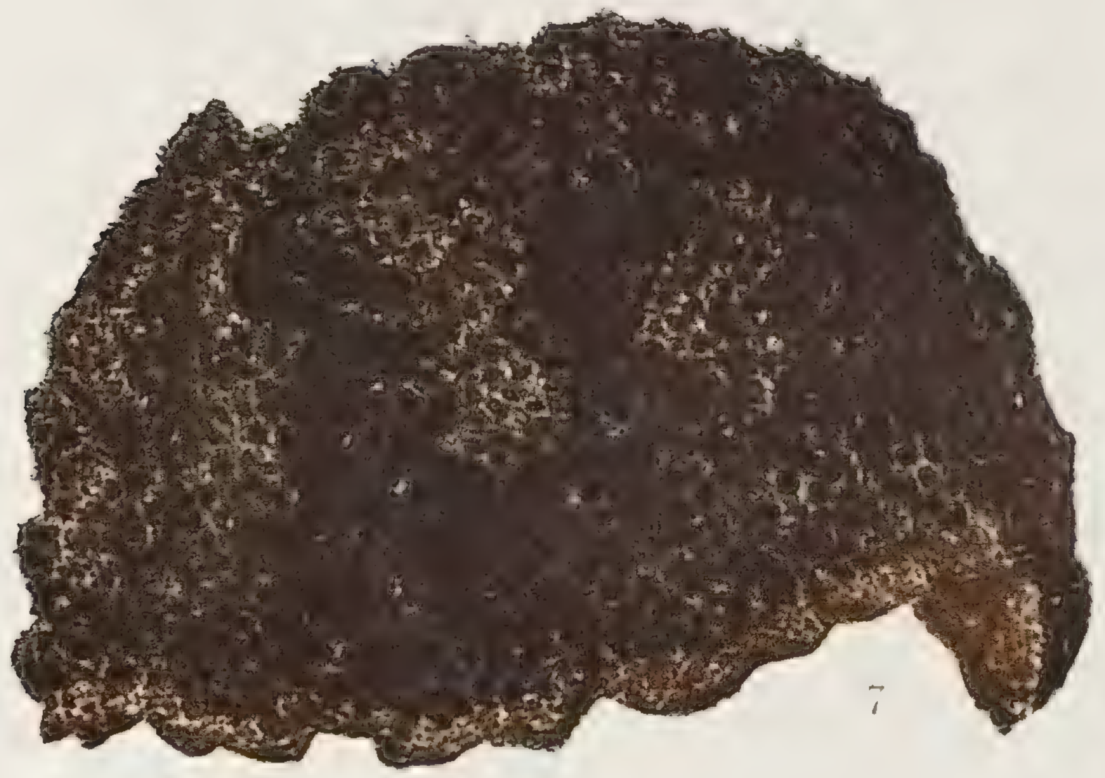
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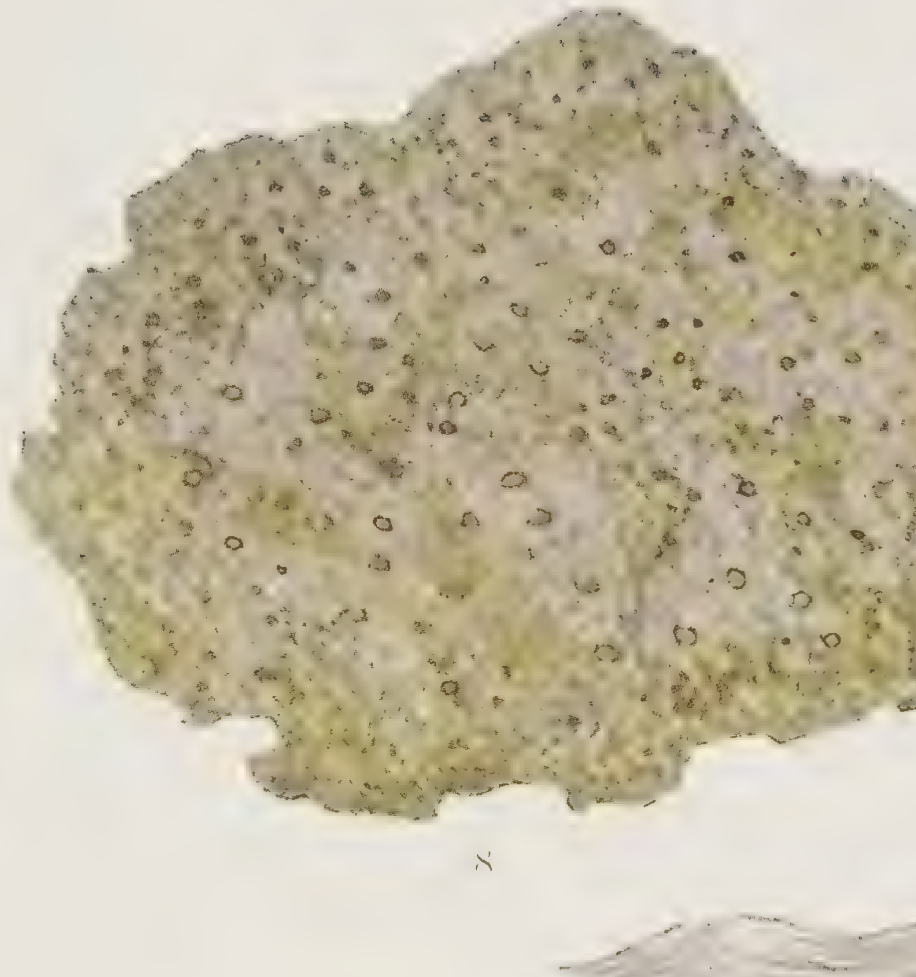
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エビアマモ

Phyllospadix japonica *Makino*

（第九十六圖版　第一圖）　×$^{1}/_{3}$

牧野，植物學雜誌 24 卷，105 頁 (1910).

海產有花植物にして密に錯綜せる匍匐莖より直立し，岩礁に固着し，短き節間を有し，節々より細長き稍厚き扁き葉を直立し，葉脚には粗き毛の如き纖維を有す．本邦暖部の外海の岩礁上に在り．本種に酷似せる一種 Phyllospadix Scouleri Hook f., スガモと稱するものは北地の海に產す．兩者とも漁夫の腰簑，莫蓙，等の材料として用ひらる．

アマモ

Zostera marina *Linné*

モシホグサ

（第九十六圖版　第二圖）　×$^{1}/_{3}$

海產有花植物にして平臥せる匍匐莖を有し，其節々より絲狀の纖維根を海底に挿入し細長き扁平なる 'バンド' 狀の葉を匍匐莖の尖端及節々より上方に直立し葉の頂端は鈍圓なり．靜穩なる入江，灣澳等の泥土若くは砂地に普通なり．嫩芽は食用とすべく又肥料として用ひらる，且種々の詰め物，荷物用若くは椅子の蒲團等に利用せられ，漁民は種々の沿岸魚類の棲息所として重要視す．

アヲノリ

Enteromorpha sp.

（第九十六圖版　第三圖）　×$^{1}/_{2}$

體は單條又は僅に分岐し，絲狀，圓柱狀等にして，中空，長く，基部の方に細長く上部の方に少しく擴がれり．色は鮮綠色なり．河口等の所に在り各地に普し．諸種採りて食用とす．

アナアヲサ

Ulva pertusa *Kjellm.*

（第九十六圖版　第四圖）　×$^{1}/_{2}$

形狀種々變化し易く，始めは他物に附着し，一般に披針狀又は卵形樣披針狀にして後不規則となり，往々游離して浮游す．綠色にして通常孔を有す．各地に普し．食用とす．種類は Ulva Lactuca L. とすべきか或は U. pertusa Kjellm. とすべきか又は兩種とも別々なるか今詳ならず．暫く本種の學名を揭ぐ．

ミル

Codium fragile (*Sur.*) *Hariot*

（第九十六圖版　第五圖）　×$^{1}/_{2}$

Codium mucronatum var. Californicum J. Ag. 岡村，日本藻類圖譜，III 卷，118 頁，130 圖版，1-9 圖．

體は 10-30 cm. 高く，1.5-3 mm. 若くは下部は夫以上太く，圓柱狀にして基部より規則正しく叉狀に分岐し枝は直上し，枝を紙上に擴げるときは美しき扇狀の輪廓を呈す．色は深綠色なり．質は海綿の如くにして液汁に富む．嫩植物は九州地方にて食用とす，又美術模樣として用ひらる．

ナガミル

Codium cylindricum *Holm.*

（第九十六圖版　第六圖）　×$^{1}/_{5}$

岡村，日本藻類圖譜，III 卷，177 頁，141 圖版．

體は長く圓柱狀にして，1-15 m. 長く，下部 10-15 mm. 太く，中央及下部に於ては遠く距りて分岐し往々 1 m. 以上距りて叉狀をなし上部の方には漸次接近す．枝は分岐點の下にて楔形又は廣き三角形に擴がり往々 12 cm. 若くは尚ほ廣き幅に擴がる．色は淡綠色又は淡黃色なり．眞珠介の上に流れ來りて蟠踞する爲め介を窒息斃死せしむ．太平洋岸各地に普し．

ワカメ

Undaria pinnatifida *Sur.*

（第九十六圖版　第七圖）　×$^{1}/_{2}$

岡村，日本藻類圖譜，V 卷，127 頁，231-235 圖版，1-10 圖

體は羽狀に分岐して，膨れたる皺多き葉片をなし，扁圓の太き莖を有し，莖は隆起せる中肋となりて葉を貫通し，1 m. 以上の高さに達す．老成するときは莖の兩側に著しく波狀をなせる襞を生じ，之に子囊を着く．色は黃褐色にして乾燥するときは綠色となる．食用とす．

ヒロメ

Undaria undarioides (*Yendo*) *Okam.*

（第九十六圖版　第八圖）　×$^{1}/_{3}$

岡村，日本藻類圖譜，V 卷，129 頁，132 圖版．

莖は通常短けれども或は 20 cm. 以上のものあり，扁壓して兩緣に薄く，多少翼を存す．體は大なる卵圓-長橢圓形又は心臟形にして長さ 60 cm. 幅 30 cm. あり．膨れたる皺ありて中肋を存す．色は黃褐色にして乾燥するときは綠色に變ず．1-5 尋の岩礁に生ず．紀伊より安房に至る，九州にもあり．食用とす．

Phyllospadix japonica *Makino.*

"Ebi-amamo."

Pl. XCVI, fig. 1.　×$^{1}/_{3}$

Makino, Botanical Magazine, Tokyo, Vol. XXIV, p. 105,1910.

Flowering plant rising from firmly matted, creeping rhizomes holding fast to rocks, with short internodes, and from nodes narrow linear, thickish, compressed leaves grow upward, with coarse hair-like fibers at the base of leaves. On rocks in the open sea in the warmer part of the country. A plant similar to the present species growing in the northern waters named *Phyll. Scouleri* Hook. f. is called "Sugamo." The plants are used as the material for waist-coats of fishermen, for mats etc.

Zostera marina *Linné.*

"Amamo," "Mosiwo-gusa."

Pl. XCVI, fig. 2.　×$^{1}/_{3}$

Linné Sp. Pl. p. 968.

Flowering plant creeping with prostrated rhizomes, from the nodes of which fibrous filamentous roots descend downwards to the bottom and long, flat, linear band-shaped leaves having blunt apices arise upward from the apex and nodes of the rhizome. Common in calm places, bays, inlets etc. on muddy or sandy shores. Young shoots edible; also used as manure, and as various stuffings, packings, pluggings etc; also considered as an important plant by fishermen as giving shelter places for various shore-fishes.

Enteromorpha sp.

"Awonori."

Pl. XCVI, fig, 3.　×$^{1}/_{2}$

Plants simple or slightly branched, filiform, cylindrical, tubular, elongated, tapering toward the base, and becoming a little wider above. Colour herbaceous green. Everywhere common in the river mouths.

Several species are edible.

Ulva pertusa *Kjellm.*

"Ana-awosa" "Awosa"

Pl. XCVI, fig. 4.　×$^{1}/_{2}$

Plant very variable in shape, at first attached and generally of lanceolate or ovato-lanceolate form, later of irregular shape and often detached and floating. Plant green and usually perforated. Very common. Edible.

Codium fragile (*Sur.*) *Hariot*

"Miru."

Pl. XCVI, fig. 5.　×$^{1}/_{2}$

Har. Alg. du Cap Horn, p. 32.—*Codium mucronatum* var. *Californicum* J. Ag. in Okam. Icon. Japanese Algae, Vol. III, p. 117, pl. CXXX, fig. 1-9.

Plant 10-30 cm. high, 1.5-3 mm. thick or much thicker below, cylindrical, soon branching from the base in regularly dichotomo-fastigiate manner. The plant assumes a flabellate outline when spread over paper. Colour deep green. Substance spongy and juicy. Common. Young shoots eaten by local people, also used as industrial design.

Codium cylindricum *Holm.*

"Naga-miru."

Pl. XCVI, fig. 6.　×$^{1}/_{5}$

Holm. New mar. Algae from Japan (Lin. Soc., Bot., XXXI) p. 250, Pl. VII, fig. 1; Okam. Icones Japanese Algae, Vol. III, p. 177, pl. CXLI.

Plant elongated, cylindrical, 1-15m. long, 10-15 mm. thick in the lower portion, distantly dichotomous in the middle and lower portions, often one meter or more remotely branched, gradually becoming shorter upwards. Branches expanding beneath forks to cuneate or broadly triangular segments, often measuring 12 cm. or more in breadth. Colour, light or yellow green. In pearl-oyster beds this plant often causes fearful damages suffocating oysters by piling up on them. Common on the Pacific coast.

Undaria pinnatifida *Sur.*

"Wakame."

Pl. XCVI, fig. 7.　×$^{1}/_{2}$

Sur. Illustr. Alg. d. Japan, p. 77, pl. VI-VII; Okam. Icon. Japanese Algae, Vol. V, p. 118, Pl. CCXXXI, CCXXXV, f. 1-10.

Plant with a pinnately sected, bullato-rugose lamina, with tereti-compressed thick stem which runs upward as a percurrent prominent midrib, attaining the height of one meter or more. In maturing a dilated undulato-folded wing formed on both sides of the stem, on the surfaces of which sporangia are produced. Colour, yellowish brown turning to green when dried. Common. Edible.

Undaria undarioides (*Yendo*) *Okam.*

"Hirome."

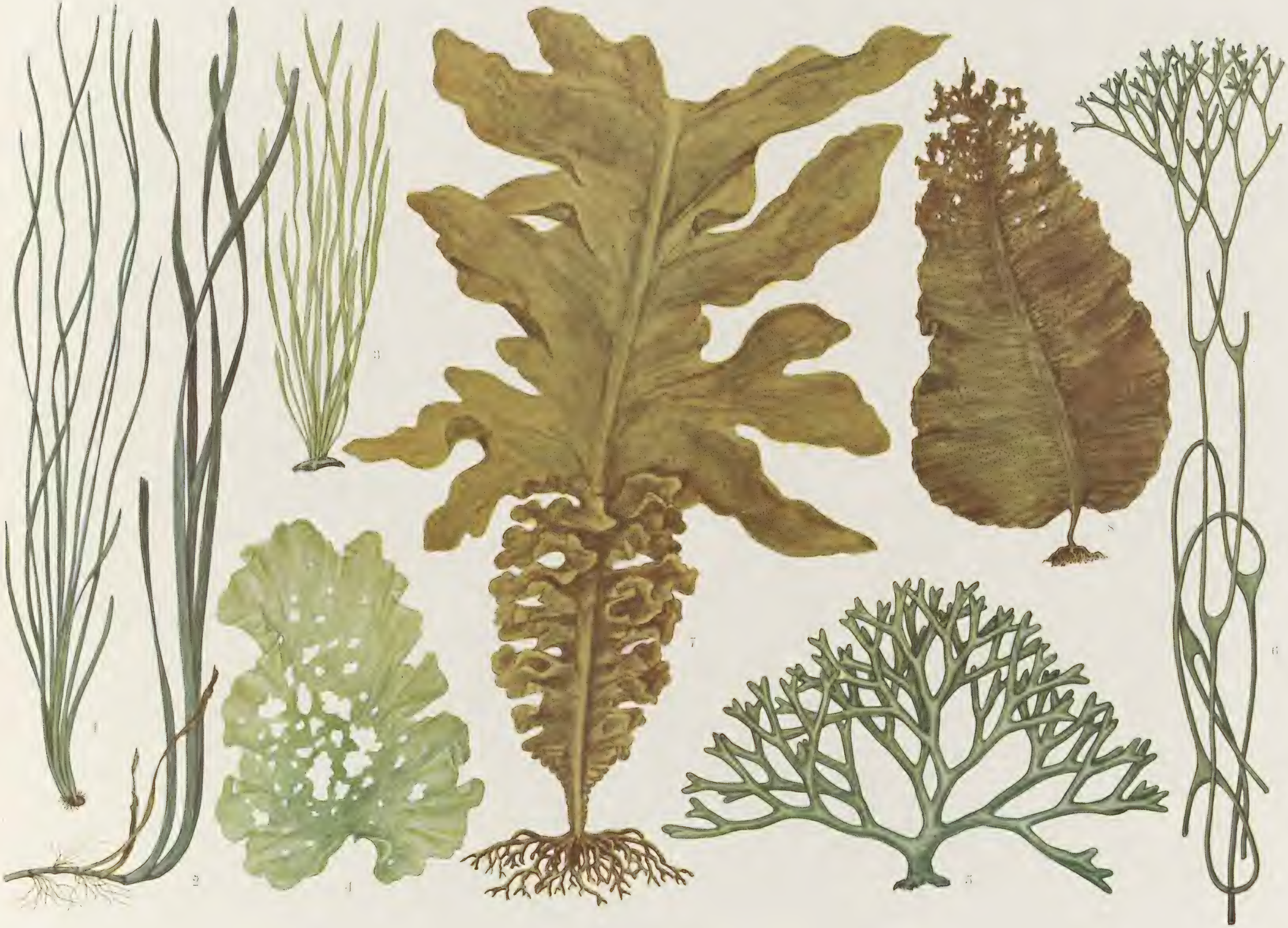
Pl. XCVI, fig. 8.　×$^{1}/_{3}$

Okam. Icon. Japanese Algae, Vol. V, p. 120, Pl. CCXXXII.

Stem usualy short, but some more than 20 cm. long, ancipito-compressed, more or less winged. Frond large, oblong ovate or cordate, entire, 60 cm. by 30 cm., bullato-rugose, midribed. Colour, yellow brown, turning to green in drying. On rocks at the depth of 1-5 fath. From Prov. Kii to Bôsyu and Kyusyu. Edible.

第九十六圖版

PL. XCVI



ハ バ ノ リ

Endarachne Binghamiae *J. Ag.*

（第九十七圖版　第一圖）

Phyllitis Fascia (*Muell.*) *Kütz.*　×1

岡村, 日本海藻圖說, I 卷, 2 册, 三五頁, 10 圖版.

體は廣き線狀又は披針狀にして平坦なる全緣を有し, 下部の方に細くなりて楔形となり頂端圓くして往々破損し, 10-20 cm. 高く, 幅 1-5 cm. あり, 各地に普し, 食用とす.

ヒ ジ キ

Turbinaria fusiformis (*Harv.*) *Yendo*

（第九十七圖版　第二圖）　×1

遠藤, Fucaceae of Japan (英語花) p. 44, pl. IV, f. 1-7; 岡村, 日本藻類圖譜, III 卷, 109 頁, 127-129 圖版, 5-12圖.

體は一條の貫通せる幹を有し, 2-3 回羽狀互生に分岐す. 枝は束の如く集りて出たる長き又は短き圓柱狀の小枝を以て密に蔽はれ, 小枝は形狀を異にす, 卽ち或ものにては棍棒狀にして頂端倒卵形の空胞に膨れ, 他のものにては長くなりて圓柱狀をなし, 多少兩端の方に細くなれり; 氣胞は微突頭をなすか又は紡錘狀なり. 充分成長したる時は體の長さ三尺に達し, 太さ 3-4 mm. あり. 九州より函館に到る太平洋岸に普通なり. 熱湯中に投入したる後乾燥して食用とす.

モ ヅ ク

Cladosiphon decipiens (*Sur.*) *Okam.*

（第九十七圖版　第三圖）　×1

岡村, 日本藻類圖譜, II 卷, 139 頁, 89 圖版.

體は絲狀にしてホンダワラ類の體上に生じ, 3-4 回互生に分岐し, 基部約 1 mm. 太く, 漸次上方に細く, 長さ 30 cm. 若くは夫以上に達す. 色は帶綠褐色なり. 質は粘滑なり. 食用とす.

マ ツ モ

Heterochordaria abietina (*Rupr.*) *S. and G.*

（第九十七圖版　第四圖）　×1

Chordaria abietina Rupr. 岡村, 日本藻類圖譜, II 卷, 124 頁, 第 85 圖版, 8-15 圖.

體は一條の幹を有し, 高さ 20-25 cm. にして, 密に各方面に廣開せる小枝を以て圍まる; 小枝は 2-4 cm. 長くして老成するときは中空となる. 色は暗褐色なり. 質は粘滑なり. 千島より犬吠崎に到る沿岸に普通なり. 食用とす.

ホ ン ダ ワ ラ

Sargassum enerve *C. Ag.*

（第九十七圖版　第五圖）　×1

岡村, 日本藻類圖譜, V 卷, 39 頁, 209 圖版.

體は數 m. 長く, 直立し, 一條の軟弱なる莖を有し, 圓き盤狀根より立ち各方面に長き枝を出す; 枝は短き小枝を同樣に密に分岐す; 莖及主枝は一般に三稜角をなし又は四角にして稜角は隆起強く, ねぢれたり. 下部の葉は下方に反り, 篦狀, 長楕圓形-披針狀にして不規則なる鋸齒を有し, 短柄あり中肋の如き線條ありて頂端に達せず; 上部の枝の葉は遙に小にして, 細く, 倒披針狀にして中肋なく, 且甚だ軟なり; 氣胞は甚だ多く, 楕圓形又は倒卵形にして柄は短く, 頂端微凸頭をなし又は小さき葉を戴く. 各地に普し. 色は黃褐色なり. 幼者は食用とす. 又新年の鏡餅の上に飾り又肥料とす.

イ ギ ス

Ceramium Boydenii *Gepp*

ア ミ ク サ

（第九十七圖版　第六圖）　×1

岡村, 日本藻類圖譜, I 卷, 249 頁, 50 圖版.

體は絲狀にして叉狀に分岐し, 緩く錯綜せる大なる團塊となりてホンダワラ類の枝上に在り. 幼き部分は老成部よりも遙に正しく叉狀をなし, 老成部には其節々より短き小枝を輪生す. 色は紅色なり. 各地に普し. 食用とす; 又テングサと混じて寒天製造の原料とす.

キ リ ン サ イ

Eucheuma muricatum (*Gmel.*) *Web. v. Bos.*

リ ウ キ ウ ツ ノ マ タ

（第九十七圖版　第七圖）　×1

Eucheuma spinosum (L.) J. Ag. 岡村, 日本藻類圖譜, II 卷, 43 頁, 51-52 圖版, 46 圖.

體は圓柱狀にして甚だ不規則に叉狀樣羽狀に分岐し, 12-22 cm. 高く, 2-3 mm. 太く, 頂端の方に細し, 體の下部は密に鈍頭なる又は圓錐狀なる突起を以て蔽はれ, 上部には往々輪生す. 色は暗紫紅色にして淡黃色となる. 質は軟骨質なり. 食用とし又寒天材料とす.

ア ヰ ミ ド リ　海 雹 菜

Brachytrichia Quoyi (*C. Ag.*) *Born. et. Flah.*

（第九十七圖版　第八圖）　×1

岡村, 日本海藻類圖譜, III 卷, 139 頁, 133 圖版, 14-17 圖.

體は扁き球狀の頭巾の如く, 直徑 5 mm. より 5 cm. に達す, 皺をなして膨れ暗青綠色又は綠紫色にして殆ど革質なり. 溫暖なる海の高潮線に近き岩石にあり. 食用とし, 支那に輸出す.

ス イ ゼ ン ジ ノ リ

Phylloderma sacrum *Sur.*

（第九十七圖版　第九圖）　×1

體は粘柔にして不規則なる球狀塊をなし, 小さき繭狀の細胞より成る. 噴出する泉の水に養はれたる水中に生ずる水草に附着して生ず. 薄き紙の如く製造して食用とす.

Endarachne Binghamiae *J. Ag.*

"Habanori."

Pl. XCVII, fig. 1.　×1

J. Ag. Anal. Alg., Cont. III, p. 27, T. 1, f. 5. *Phyllitis Fascia* (Muell.) Kütz. in Okam. Illustr. Mar. Alg. Japan, Vol. I, n. 2, p. 27, Pl. X.

Plant broadly linear or lanceolate, with flat and entire margin, tapering to a cuneate base with rounded and often eroded apex, 10–20 cm. high, 1–5 cm. broad. Common. Edible.

? Turbinaria fusiformis (*Harv.*) *Yendo.*

"Hiziki."

Pl. XCVII, fig. 2.　×1

Yendo Fucaceae of Japan, p. 44, pl. IV, f. 1–7; Okam. Icon. Japanese Algae, Vol. III, p. 109, Pl. CXXVIII–CXXIX, f. 5–12.

Frond with a percurrent cylindrical stem, branching in 2–3 times pinnato-alternate manner. Branches densely crowded with fasciculately rising longer or shorter cylindrical ramuli; ramuli varying in shape, in some clavate and inflating toward apex to a obovate vescicle, in others elongated and cylindrical becoming more or less narrower to both ends; vesicle either mucronated or fusiform. When fully grown, the plant attains one meter in length, with the diameter of 3–4 mm. Common along the Pacific coast from Kyushyu to Hakodate. Used as food after having been dipped in boiling water.

Cladosiphon decipiens (*Sur.*) *Okam.*

"Mozuku."

Pl. XCVII, fig. 3.　×1

Frond filiform, pliable, growing on *Sargassum*, 3–4 times alternately branched, about 1 mm. thick at base, gradually narrowing upward. The plant attains 30 cm. or more in length. Colour olive-brown. Substance slimy. Edible.

Heterochordaria abietina (*Rupr.*) *S. and G.*

"Matumo."

Pl. XCVII, fig. 4.　×1

Setch. and Gardn. Mar. Alg. Pacif. Coast of N. Am. III. Phaeophyceae, p. 550, Pl. 36 and 91. *Chordaria abietina* Rupr. in Okam. Icones Japanese Algæ, Vol. II, p. 122, Pl. LXXXV, f. 8–15.

Fronds with a simple percurrent stem, 20–25 cm. high, densely surrounded on all sides with patent ramuli which are 2–4 cm. long and become tubular in age. Colour dark brown. Substance lubricous. Common from the Kuriles to Cape Inuboe. Edible.

Sargassum enerve *C. Ag.*

"Hondawara."

Pl. XCVII, fig. 5.　×1

C. Ag. Sp. p. 17; Okam. Icon. Japanese Algae, Vol. V, p. 29, Pl. CCIX.

Plant many meters long, erect with a weak percurrent stem, rising from the tip of a circular disc, giving rise on all sides to long branches, which are closely branched in a similar manner with short, ultimate ramuli; stem and main branches generally tri- or quadrangular with prominent ridge and strongly twisted. Lower leaves retrofracted, spatulate, oblongo-lanceolate, irregularly serrated, with a short pedicel and an evanescent costal line; those on the upper branches much smaller, linear, oblanceolate, ribless and very soft; vesicles abundant, elliptical or obovate with very short pedicel, mucronated or crowned with a small leaflet. Common. Colour yellowish brown. Young shoots edible; also used as an ornament of the Japanese New Year festival and as manure.

Ceramium Boydenii *Gepp.*

"Igisu," "Amikusa."

Pl. XCVII, fig. 6.　×1

Gepp Chinese Mar. Algae (Journ. of Bot., Vol. 42) p. 164, Pl. 460, f. 1–3; Okam. Icon. Japanese Algae, vol. I, p. 248, Pl. L.

Fronds filiform, dichotomously branched, forming a large mass of loosely interwoven filaments entangled on the branches of *Sargassum* and other algae. Younger portion more regularly dichotomous than the older portions, where short ramuli arise in verticillate manner from nodes. Colour red. Common. Edible; also used as material for making seaweed jelly mixing with *Gelidium*.

Eucheuma muricatum (*Gmel.*) *Web. v. B.*

"Kirinsai," "Ryukyu-tunomata."

Pl. XCVII, fig. 7.　×1

Web. v. Bos. Liste d. alg. d. Siboga, p. 413, Pl. XII, 6. 1–5. *Eucheuma spinosum* (L.) J. Ag Okam. Icon. Japanese Algae, Vol. II, p. 41, Pl. LXI-LXII, f. 46.

Frond cylindrical, very irregularly branched in the dichotomo-pinate manner, 12–22 cm. high, 2–3 mm. thick, tapering toward apex; densely covered with blunt or conical protuberances in lower portion, often rising in verticillate manner in upper branches. Colour dark purple, fading to yellowish. Substance cartilaginous. Edible; also made into Japanese seaweed jelly.

Brachytrichia Quoyi (*C. Ag.*) *Born. et Flah.*

"Aimidori," "Kaihyosai."

Pl. XCVII, fig. 8.　×1

Born. et Flah. Revision d. Nostoc Heterocyst (Ann. de Sc. nat, 1886,) p. 373; Okam Icones Japanese Algae. Vol. III, p. 1 37, Pl. CXXXIII f. 14–17.

Fronds depresso-globular, sack-like, 5 mm. to 5 cm. in diameter, plicato-expanding and bullate, of dark bluish-green or violet and almost leathery. On rocks near high tide in warmer parts. Edible, and exported to China.

Phylloderma sacrum *Sur.*

"Suizenzinori."

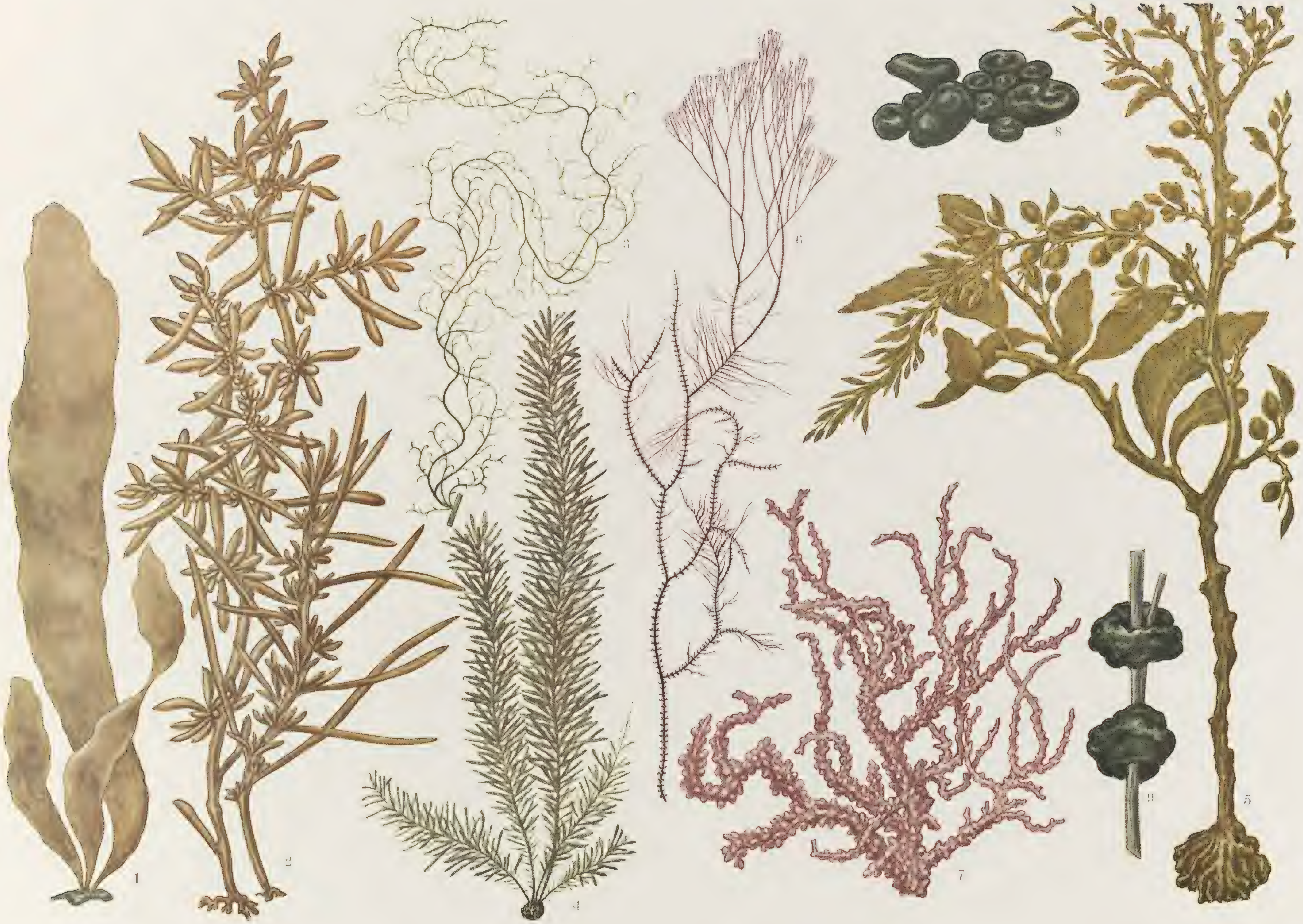
Pl. XCVII, fig. 9.　×1

Sur. Illustr. Alg. Japan, II, p. 71, f 22–23.

Fronds gelatinous, irregularly roundish mass, consisting of small cocoon-like cells. On the stem of aqueous plants in the waters fed by spring water. Edible and made into thin paper-like sheets.

第九十七圖版

PL. XCVII



ツルモ

Chorda Filum (*L.*) *Lam.*

（第九十八圖版　第一圖）　$\times {}^{2}/_{3}$

岡村, 日本海藻圖說, I 卷, 4 册, 七六頁, 20 圖版.

體は單條にして紐の如く, 圓柱狀, 老成するに至れば時としてねぢれ, 長さ 3-4 m., 直徑中央部に於て 3-5 mm., 基部は細き莖となり漸次上部の方に細く, 幼時は淡黃色の毛を以て蔽はる. 灣, 入江等に普通なり. 食用とす.

ツルアラメ

Ecklonia stolonifera *Okam.*

（第九十八圖版　第二圖）　$\times {}^{1}/_{2}$

岡村, 日本藻類圖譜, III 卷, 175 頁, 112 圖版.

體は披針狀にして單條又は羽狀に分岐し, 密に皺を有し, 兩緣粗く齒狀をなし, 長さ 50-85 cm., 幅 15-30 cm にして莖の長さ 13-23 cm. あり, 分岐せる纖維根より立つ, 根は或は匐枝の如く伸び新條を發するものあり. 色は淡き黃褐色なり. 2-6 尋の深處に在る岩礁に附く. 日本海に普通なり. 食用とす.

アラメ

Eisenia bicyclis (*Kjellm.*) *Setch.*

（第九十八圖版　第三, 第四圖）第三, $\times {}^{1}/_{2}$, 第四 $\times {}^{1}/_{5}$

岡村, 日本藻類圖譜, V 卷, 152 頁, 238-239 圖版.

成長の初期には體は單にコンブの如き形狀をなす（第三圖）; 後速に小さき齒狀突起は葉の基部の兩側に現れ, 漸次伸長して側葉となる. 初年の終には體は 20-30 cm. の長さに達し幅 5 cm. より 10 cm. となる. 此に於て中央葉（莖より連續せる葉）は上部より下部の方に漸次腐朽して成長點附近迄落つ. 斯くて莖の上部は叉狀を呈し其各叉枝は外部より內部に向つて卷き込み之と同時に其部は厚くなりて枝の如くなる; 斯の如くして作られたる枝端は少しく擴がりて扁き舌狀片となる（第四圖）. 此舌狀片は強く襞をなし其緣邊より多數の單條又は羽狀に分岐せる葉を着く. 葉は通常 30 cm. 長く, 3-4 cm 廣し. 莖は水深と周圍の狀況とによりて變化し, 高潮線附近に生ずる體は極めて短くして太き莖を有し, 莖の長さ僅に 1 cm. 幅（長徑にて）2.5 cm. を有す; 水の深くなるに隨て莖は漸次伸長して 2 m. 半に達す, 而して略ぼ圓柱狀にして直徑 2-3 cm. となり, 全部實質なり. 葉は常に密に皺を存す. 色は褐色なり. 質は革質にして硬し. 九州より津輕海峽に至る兩海岸に弘く分布す. 食用とし又沃度灰とす.

クロメ

Ecklonia kromé *Okam.*

（第九十八圖版　第五圖）　$\times {}^{1}/_{5}$

岡村, 日本藻類圖譜, V 卷, 149 頁, 236 圖版, 8 圖, 237 圖版.

體は殆どカヂメと形狀を同じくし唯體の大さと莖の實質なることを以て異なれりとす, 而して中央葉はカヂメの如く厚からずして表面皺を有す. 體の大さ及形狀は水深と周圍の狀況とによりて變じ, 莖は長さ 2-7 cm. より 1 m. に變じ中央葉は 30 より 60 cm. に達す. 此植物には皺は特徵にして, 殆ど皺なきが如きものも仔細に觀察するときは葉の末端の方に多少の皺を有するを見るべし. 色は暗褐色にして黑變す. 質は硬し. 食用とし又沃度灰とす.

カヂメ

Ecklonia cava *Kjellm.*

ノロカジメ

（第九十八圖版　第六圖）　$\times {}^{1}/_{6}$

岡村, 日本藻類圖譜, V 卷, 147 頁, 236 圖版, 1-7 圖.

體は大にして殆ど圓柱狀の莖を有し, 莖の長さ 1-2 m. 乃至餘あり, 中央部少しく膨れ其部は中空となる; 莖の上部は漸次扁くなりて中央葉の楔形なる基部となり; 中央葉は充分發育したるときは長さ 60-70 cm. に達し, 幅 7-15 cm. ありて, 其中央部に縱に厚くなり兩緣の方に漸次薄く, 其薄き部分は甚しく波狀の襞をなして羽狀に分岐し, 羽狀の葉は互に相接近して出づ. 羽狀の葉は 60 cm. の長さに達し又遠く距りて羽狀に分る. 中央葉の中央部は 7 mm. 以上の厚さを有するに至る. 體は大なるものにては 2 m. 半の高さを有するも, 通常は 1 m. 半程なり. 各部平坦にして全く皺なし. 水深 3-4 尋より 20 尋の岩礁に生ず. 太平洋沿岸の中央部に產す. 沃度灰として用ふ.

ネコアシコンブ

Arthrothamnus bifidus (*Gmel.*) *Rupr.*

（第九十八圖版　第七圖）　$\times {}^{1}/_{3}$

岡村, 日本藻類圖譜, V 卷, 100 頁, 227 圖版.

發生の初期には體は半圓形の葉を有するのみ. 後成長部に近き葉の兩緣の一部が一回內側に向つて卷く. 此卷きたる部分の內緣の上部は短き圓柱狀の莖となり其上部は徐々に細長き葉片となる. 之を第二次の葉とす。此時代に於て初めの圓き葉は消滅し上に記したる如くにして新に成りたる二條の莖の間に廣き灣を形成す. 成長するに隨つて兩側の莖は太さを增し其基部の周圍に堅牢なる突起の如くなりて根を形成す. 後始めの莖は漸次大きく且厚く爲る. 第二次の葉が充分なる大さに成長する時は其成長部の兩緣は耳朶の如き形狀を爲す. 次に此耳朶の基部に於て一回卷き第三次の葉片は耳朶の伸長に依りて形成せられ第二次の葉片は漸次消失して前と同樣に彎形の痕を殘す. 第二次の葉片の全く消失したる時, 第二次の莖は楔形となる. 斯くて一年に一回宛同樣の成長を反覆す; 然れども數年の後には舊き莖は漸次腐朽し, 且枝も或は冬期中の荒波の爲めに切れて消失す. 之が爲めに體は極めて厚くして殆ど木質の如く堅き叉狀をなせる楔形の莖を有するに至る. 老成せる體の葉片は線狀にして長さ 2-4 m. 幅 4-5 cm. を有す. 3-4 尋の深處に在る岩礁に生ず. 千島より厚岸に至る. 食用とし又沃度灰とす.

トロロコンブ

Kjellmanniella gyrata (*Kjellm.*) *Miyabe*

（第九十八圖版　第八圖）　$\times {}^{1}/_{6}$

宮部, 昆布, 44 頁, 15-16 圖; 岡村, 日本藻類圖譜, V卷, 95 頁, 223 圖版.

體はコンブに異ならずして線狀-披針狀をなし, 長さ 1-5 m., 幅 7-12 cm. あり. 中帶部（葉の中央にある幅狹き部分）は細長き線狀にして其兩側に規則正しく橫に緣邊の方に龍紋狀の皺を出す. 色は黃褐色なり. 質は軟き革質にして粘質に富む. 4-5 尋の水底にある岩礁に生ず. 千島より釧路に到る. 食用.

コンブ

Laminaria japonica *Aresch.*

マコンブ

（第九十八圖版　第九圖）　$\times {}^{1}/_{10}$

岡村, 日本藻類圖譜, V 卷, 85 頁, 221 圖版.

體は大にして廣き披針狀をなし, 短き, 太き扁圓なる莖を有し樹枝狀に分岐せる根より立ち, 長さ 2-4 m., 幅 20-30 cm. あり. 室蘭より陸前金華山に到る沿岸, 樺太に在り. 食用とし又沃度灰とす.

ミツイシコンブ

Laminaria angustata *Kjellm.*

ナガコンブ

（第九十八圖版　第十圖）　$\times {}^{1}/_{8}$

L. longissima 宮部, 昆布, 37 頁, 4 圖版.

體はバンド狀にして, 甚だ長く, 緣邊少しく波狀の襞をなし, 細き短き莖を有し, 數十 m. の長さを有し, 幅 10-15 cm. あり. 占守島より室蘭に至る. 食用.

Chorda Filum (*L.*) *Lam.*

"Turumo."

Pl. XCVIII, fig. 1.　$\times {}^{2}/_{3}$

Lam. Essai, p. 26; Okam. Illustr. of Mar. Alg. Japan, Vol. I, No. IV, p. 55, Pl. XX.

Frond simple, chord-like, cylindrical, sometimes twisted when aged, 3-4 m. in length, 3-5 mm. in diam. in the middle portion, very much attenuated to a filiform stem at the base and gradually tapering to a rather acute apex, covered when young with pale yellowish hairs. Common in bays or inlets. Edible.

Ecklonia stolonifera *Okam.*

"Turu-arame."

Pl. XCVIII, fig. 2.　$\times {}^{1}/_{2}$

Okam. Icones Japanese Algae, Vol. III, p. 172, Pl. CXII.

Frond lanceolate, leaf-like, simple or pinnately branched, densely rugulose, roughly toothed at margins, 50-85 cm. long, 15-30 cm. broad, with stem 13-23 cm. in length, rising from branched roots, some of which elongate to stolon, from which young fronds grow up. Colour light yellowish brown. On rocks at the depth of 2-6 fath. Common in the Japan Sea. Edible.

Eisenia bicyclis (*Kjellm.*) *Setch.*

"Arame."

Pl. XCVIII, fig. 3-4.　Fig. 3, $\times {}^{1}/_{2}$; fig. 4, $\times {}^{1}/_{5}$.

Setch. Post-embryon. stages of the Laminariaceae (Univ. Calif. Publ., Bot., 1905), p. 129; Okam. Icon. Japanese Algae, Vol. V, p. 140, Pl. CCXXXVIII-CCXXXIX.

At the beginning of growth the plant has a simple Laminarian form (fig. 3); soon minute teeth-like processes appear on both sides of the base, which gradually grow up to lateral leaves. At the end of the first year growth, the plant attains some 20-30 cm. in length and the breadth of the lamina varies from 5-10 cm. Now the central lamina begins gradually to wear away from the top downwards as far as near to the transition-place. The upper portion of stem thus becomes forked and each arm turns from the outside to the inner, and by thickening, it appears like a branch (fig. 4). The extremity of branches thus formed becomes slightly broadened to a flat ligule. The ligule becoming strongly undulato-folded, bears numerous simple or pinnately branched leaves. Leaves usually 30 cm. long, 3-4 cm broad. Stem varying in length according to the depth and surroundings in which the plant grows. The plant growing near high tide has a very short and thick stem having the length of 1 cm. and the longer diameter of 2.5 cm.; as the depth increases the stem gradually becomes longer up to 2 m. and a half; it is almost terete having 2-3 cm. in diam. and is solid throughout. Leaves always densely rugose. Colour brown. Substance leathery and coriaceous. Widely distributed along both coasts from Kyushyu to the Strait of Tsugaru. Used as food as well as kelp.

Ecklonia kuromé *Okam.*

"Kurome."

Pl. XCVIII, fig. 5.　$\times {}^{1}/_{5}$

Okam. Icon. Japanese Algae, Vol. V, p. 137, Pl. CCXXXVI, fig. 8 and Pl. CCXXXVII.

Plant almost same as *Ecklonia cava* in shape, only differing in size and solidness of stem, by having the central lamina not so thick as in that plant and by having rugose surface. The size and habit of the plant vary according to the depth and environments in which the plant grows. Stem varies from 2-7 cm. to one meter in length, and the central lamina from 30 to 60 cm. In this plant rugae are characteristic, though there are some fronds in which rugae are hardly visible, but even in those wrinkless fronds rugose character is more or less visible by careful observation toward the extremity of leaves. Colour dark brown turning to blackish. Substance coriaceous. Edible, and also used as kelp.

Ecklonia cava *Kjellm.*

"Kazime," "Norokazime"

Pl. XCVIII, fig. 6.　$\times {}^{1}/_{6}$

Kjellm. In Kjellm. och Peters. Om Japans Lamin. p. 273, T. 10, f. 7-8; Okam. Icon. Japanese Algae., Vol. V. p. 135, Pl. CCXXXVI, f. 1-7.

Plant large, with almost cylindrical stem which attains the length of 1-2 m. or more, slightly swollen in the middle portion becoming a little hollow in that part; the upper portion of stem gradually compressed to cuneate base of the central lamina. The central lamina when fully developed attains the length of 60-70 cm. and the breadth of 7-15 cm., with the median portion longitudinally thickened and becoming gradually thinner toward both margins where the central lamina is deeply undulato-plicated giving rise to lateral pinnae standing close to each other. Pinnae dividing remotely in a pinnate manner, attain the length of 60 cm. The median portion of the central lamina becomes as thick as 7 mm. or more. Plant attains the height of 2 m. and half in larger ones, usually $1^{1}/_{2}$ meter. Every part flat and not rugose. On rocks in deeper waters extending from 3-4 to 20 fath. The middle portion of the Main Island on the Pacific side. Used as kelp.

Arthrothamnus bifidus (*Gmel.*) *Rupr.*

"Nekoasi-kombu."

Pl. XCVIII, fig. 7.　$\times {}^{1}/_{3}$

Rupr. Tange, p. 350; Okam. Icon. Japanese Algæ, Vol. V, p. 100, Pl. CCXXVII.

In early stages the plant is quite a Laminarian form having a simple linear frond. Later a limited portion of the margins close at the transition region is scrolled inside for one turn. The apical portion of the inner edge of the scroll develops a short cylindrical stem which gently expands to a narrow lamina. The primary lamina disappears in this stage leaving a wide sinus between the new stems. As the plant grows larger, the stems begin to increase their thickness and the rhizomes begin to appear as stout processes around their basal parts. Afterwards the primary stem grows larger and thicker. When the secondary lamina grows to its full size, the margins at the transition region begin to expand like an auricle on each side. The scrolls are formed at the margins of the auricles, the tertiary lamina sprung out from stem and the secondary lamina gradually wears away leaving a scar as before. When the secondary laminae have wholly disappeared, the secondary stems become wedge-shaped The successive growth takes place once a year repeating the similar processes at each growth; but after several years the old stems wear away and some of the branches are broken off in the heavy storms during winter. The final result is an irregular dichotomous, having very thick and almost woody wedge-shaped stem. Lamina of an old frond is linear and measures 2-4 m. in length, 4-5 cm. in breadth. On rocks at the depth of 3-4 fath. From the Kurile Islands to Akkeshi. Edible; also used as kelp.

Kjellmanniella gyrata (*Kjellm.*) *Miyabe.*

"Tororo-kombu."

Pl. XCVIII, fig. 8.　$\times {}^{1}/_{6}$

Miyabe Laminariaceae (Japanese), p. 44, pl. 15-16; Okam. Icon. Japanese Algae, Vol. V, p. 88, pl. CCXXIII.

Plant like *Laminaria* in form being linear lanceolate, 1-5 m. long, 7-12 cm. broad. Median fascia narrow-linear, from which regularly arranged gyrations extend transversely toward both margins. Colour yellowish-brown. Substance soft leathery, and rich with mucilage. On rocks at the depth of 4-5 fath. From the Kurile to Kushiro. Edible.

Laminaria japonica *Aresch.*

"Kombu," "Makombu"

Pl. XCVIII, fig. 9.　$\times {}^{1}/_{10}$

Aresch. Phyc. Capensis, p. 29; Okam. Icones Japanese Algae, Vol. V, p. 85, Pl. CCXXI.

Plant large, broadly lanceolate, with short, thick, tereti-compressed stem, rising from dendritic roots, attaining the length of 2-4 m. and the breadth of 20-30 cm. On the Pacific coast from Muroran to Kinkwazan, Karahuto. Used as food and also as kelp.

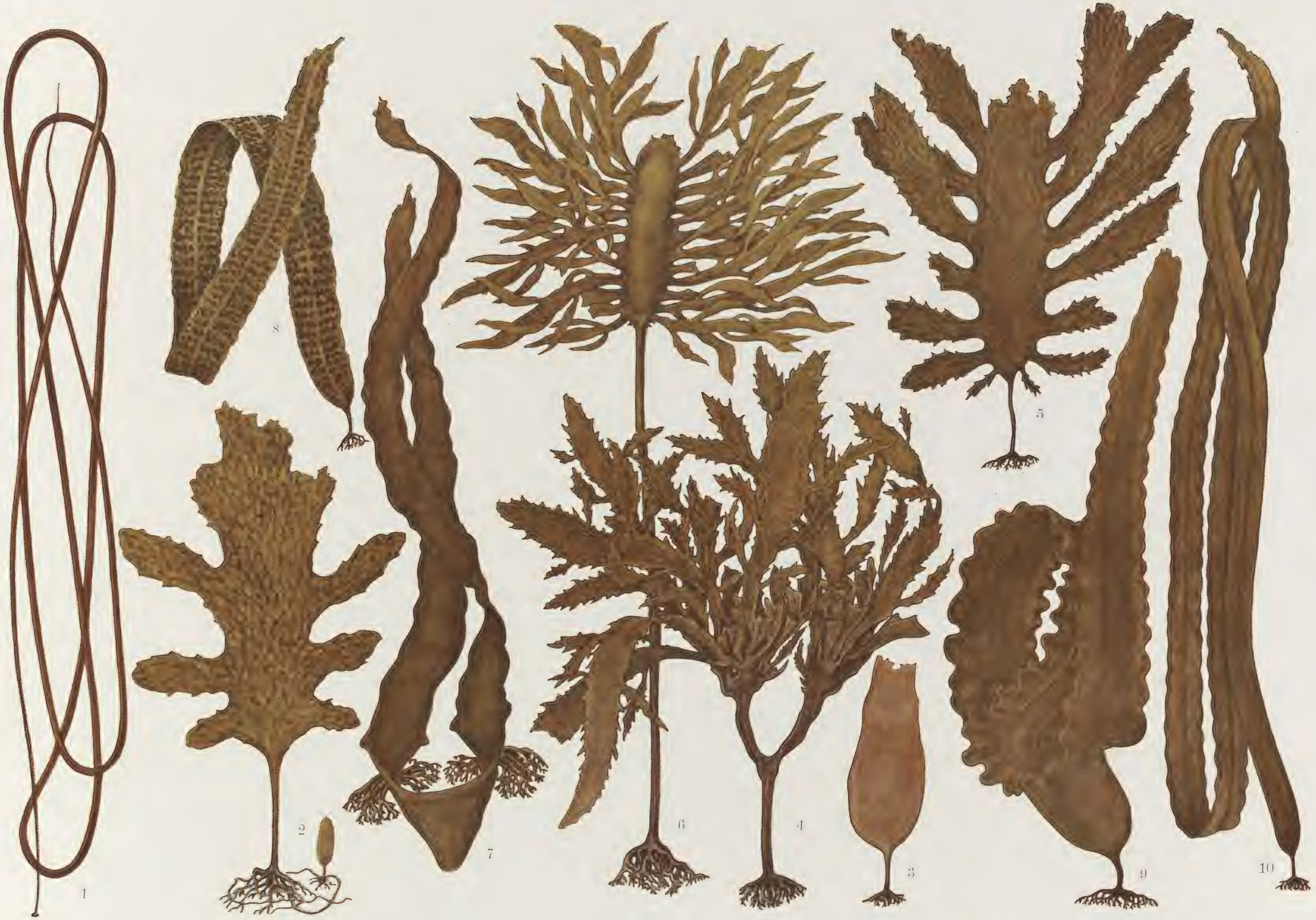
Laminaria angustata *Kjellm.*

"Mituisi-kombu," "Nagakombu."

Pl. XCVIII, fig. 10.　$\times {}^{1}/_{8}$

Kjellm. in Kjellm. och Peters. Om Japans Laminariaceer, p. 266. *Laminaria longissima* Miyabe Laminariaceae, p. 37, Pl. IV (In Japanese).

Plant band-shaped, very long, slightly undulato-folded at margin, with a short slender stem, attaining a length of many decameters, with a breadth of 10-15 cm. Along the Pacific coast from Syumusyu Isl. to Muroran. Edible.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オホブサ

Gelidium pacificum *Okam.*

（第九十九圖版　第一圖）　×1

岡村, 日本藻類圖譜, III 卷, 101 頁, 121–127 圖版, 9–11 圖.

體は長く, 線狀, 扁壓にして兩緣に薄く, 3–4 回互生叉は對生にして羽狀に分岐し, 通常 15–20 cm. 長けれども, 時に 30–40 cm. に及ぶ, 枝は廣開し, 大なる枝は輕く雁木狀に屈曲す. 色は紫紅色. 3–11 等の岩礁に在り ; 伊豆七島より相模, 安房に至る. 寒天材料として優品なり.

オニクサ

Gelidium japonicum (*Harv.*) *Okam.*

（第九十九圖版　第二圖）　×1

岡村, 日本海藻圖說, I 卷, 5 册, 七九 頁, 21 圖版.

體は線狀, 扁壓にして兩緣に薄く, 中肋を存し, 兩緣より互生に分岐し且兩緣より密に副枝を生じ, 體の高さ 4–20 cm. 幅 1.5–2 mm. あり, 副枝の基部は狹く, 不規則に羽狀に分岐し, 概ね短し. 色は濃紫色. 質は硬くして軟骨質なり. 臺灣より常陸に到る太平洋沿岸に普通なり ; 本州中部の日本海沿岸には稀なり. 寒天材料とす.

テングサ

Gelidium Amansii *Lamour.*

マクサ

（第九十九圖版　第三圖）　×1

岡村, 日本藻類圖譜, III 卷, 27 頁, 106 圖版.

體は絲狀叉線狀にして纖維根を以て立ち, 扁壓にして兩緣に薄く叉は殆ど扁平, 基部附近より密に 3–4 回羽狀に分岐し, 互生, 對生叉は不規則に出たる廣開せる枝を有し, 枝は往々少しくうねり, 下部の枝は上部のものより長く, 漸次上方に短くして同樣に次位の小枝を有す, 體の長さ 10–25 cm. 通常 10–15 cm. 幅 0.5–2 mm. あり. 紫色なり. 質は軟骨質なり. 九州より陸前金華山に至る兩沿岸に普通なり. 寒天材料とす.

ユヒキリ

Acanthopeltis japonica *Okam.*

トリノアシ

（第九十九圖版　第四圖）　×1

岡村, 日本海藻圖說, I 卷, 2 册, 一九頁. 6 圖版.

體は圓柱狀にして互生叉は稍叉狀に分岐し, 長さ 5–20 cm. 直徑 2–3 mm. 太く各部は密に鍔の如き稍圓形の小枝を存し, 小枝は螺旋狀の如く配置し, 幅約 3 mm. ありて其基部は莖を抱く, 而して單條叉は分岐せる刺狀突起を其兩面に存す. 色は紫色, 質は軟骨質なり. 九州より上總に到る深所の岩礁に在り. 寒天材料とす.

オキツノリ

Gymnogongrus flabelliformis *Harv.*

（第九十九圖版　第五圖）　×1

岡村, 日本藻類圖譜, IV 卷, 139 頁, 181–182 圖版.

體は細線狀, 扁壓, 數回正しく叉狀に分岐して扇狀をなし, 相接近して分岐し, 各部は少しく廣開して直上し, 腋圓く, 高さ 4–8 cm. 幅 1–1.5 mm. あり. 緣邊は副枝を存し或は之を缺く ; 副枝は單條叉は 2–3 回分岐す ; 枝端鈍圓叉は尖り, 往々凹み叉は二裂す. 色は紫色叉は葡萄酒紅, 軟骨質なり. 布類の糊料とす.

サイミ

Ahnfeltia concinna *J. Ag.*

（第九十九圖版　第六圖）　×1

岡村, 日本藻類圖譜, IV 卷, 179 頁, 191 圖版, 1–7 圖.

體は直立し, 角質にして稍圓柱狀, 5–15 cm. 高く, 直徑 1–2 mm. あり, 基部より多少長き間莖の如く, 通常叉狀に分岐して, 往々不規則に屈曲し, 副枝を存す, 副枝は往々束狀に出で叉は一方の側に偏在す. 小笠原島より相模伊豆に到る. 布類の糊料とす.

ギンアンサウ

Iridaea laminarioides var. Cornucopiae *J. Ag.*

（第九十九圖版　第七圖）　$\times {}^{1}/_{3}$

遠藤, Notes on Alg. new to Japan, VI, p. 28 (植物學雜誌三十一卷), 78 頁, 1 圖.

體は扁平, 葉狀, 倒卵形叉は長楕圓形にして, 單條叉は分裂し頂部圓く, 下部多少長き楔形の莖となり, 10–20 cm. 高く, 幅 5–15 cm. あり. 光澤あり. 色は青紫色. 質は革質なり. 壁土の糊として用ゐ叉粗布の糊料とす.

スギノリ

Gigartina tenella *Harv.*

（第九十九圖版　第八圖）　×1

岡村, 日本藻類圖譜, I 卷, 162 頁, 33 圖版, 1–8 圖.

體は扁壓, 線狀 ; 不規則に羽狀に分岐し互生と對生と混在し, 廣開し枝端尖り, 往々强く反り曲る ; 體の高さ 5–12 cm. 幅 2–3 mm. あり. 色は暗紫色. 質は軟骨質なり. 隨所に普し. 綿布類の糊料とす.

コメノリ

Grateloupia flabellata *Holm.*

（第九十九圖版　第九圖）　×1

體は短く線狀, 扁壓, 規則正しく數回叉狀に分岐し, 扇狀にして各部は直立し腋狹く, 枝端鈍頭叉は舌狀をなし往々二裂し, 高さ 3–5 cm. 幅 3–4 mm. あり. 色は帶綠紫色なり. 質は軟骨質なり. 各地に普し. 食用とし叉布類の糊料とす.

オゴノリ

Gracilaria confervoides (*L.*) *Grev.*

（第九十九圖版　10–11 圖）　×1

岡村, 日本藻類圖譜, IV 卷, 1 頁, 151 圖版.

體は絲狀, 密に各方面に互生に分岐し, 枝は直立し叉は廣開し, 5–20 cm. 高く, 時に 60 cm. 叉は夫以上あり, 直徑通常 1 mm より少なし, 時に 2–3 mm. あり ; 枝は長く, 漸次枝端の方に細く, 往々少しくうねり, 同樣なる短き小枝を有し概ね一方に偏在せる小枝を側面に出す ; 各部の枝は基部强くくびれ上部に細し (第十圖). 囊果は枝の側面に膨大し半球狀をなす (11 圖). 色は褐紫色叉は綠色なり. 質は軟骨質なり. 各地に普し. 食用とし, 叉糊料とし寒天製造に混用す.

シラモ

Gracilaria compressa (*Ag.*) *Grev.*

（第九十九圖　第 12 圖）　×1

岡村, 日本藻類圖譜, V 卷, 171 頁, 242 圖版, 5–10 圖.

體は絲狀叉は圓柱狀にして, 15–30 cm. 高く, 2–3 mm. 太く, 2–3 回羽狀に分岐す ; 枝は長く極めて廣くして圓き腋を以て互生し其處此處に稍叉枝の如き部分をなす, 枝は稍うねり, 一方に偏在せる小枝を存す ; 枝は總て枝端に細く, 基部くびれずして太し. 各地に普し. 食用とし叉寒天材料とす.

カバノリ

Gracilaria Textorii *Sur.*

（第九十九圖版　第 13 圖）　×1

岡村, 日本海藻圖說, I 卷, 5 册, 九二頁, 23 圖版.

體は扁平にしてバンド狀をなし, 硬く, 叉狀叉は稍掌狀に分岐す, 廣き線狀の廣開せる枝をなし, 腋圓し, 各部は 1–3 cm. 廣く, 枝端鈍頭叉は舌狀若くは二裂し, 兩緣全緣なり, 10–20 cm. 高し. 色は紫色. 質は軟き軟骨質なり. 各地に普し. 越後地方にて食用とす.

Gelidium pacificum *Okam.*

"Ohbusa."

Pl. XCIX, fig. 1.　×1

Okam. Icon. Japanese Algae, Vol. III, p. 99, Pl. CXXVI-CXXVII, f. 9-11.

Plant high, linear, ancipito-compressed, 3-4 times pinnately branched in an alternate or opposite manner, 30-40 cm., usually 15-20 cm. long, with patent branches and larger branches slightly flexuose. Colour puplish red. On rocks at the depth of 3-11 fath. Common in the Seven Islands of Idu to Prov. Sagami and Bosyu. Used in making Japanese seaweed-jelly.

Gelidium japonicum (*Harv.*) *Okam.*

"Onikusa."

Pl. XCIX, fig. 2.　×1

Okam. Illustr. of the Marine Algae of Japan, Vol. I, no. 5, p. 57, Pl. XXI. *Suhria Japonica* Harv. Alg. Wright., No. 26

Frond linear, ancipito-compressed, midribed, alternately branching from sides and densely proliferating from both margins, 4-20 cm. long, 1.5-2 mm broad, with proliferations narrowed at base and irregularly branched in pinnate manner, mostly remaining short. Colour deep purplish-red. Substance rigid and cartilaginous. Common along the Pacific coast from Taiwan to Prov. Hitachi; rare on the Japan Sea Coast of the Main Island. Used for making Japanese seaweed jelly.

Gelidium Amansii *Lamour.*

"Tengusa."

Pl. XCIX, fig 3.　×1

Okam. Icon. Japanese Algae, Vol. III, p. 25, Pl. CVI.

Frond filiform or linear, rising from fibrous roots, ancipito-compressed or almost flat, densely branched from near the base in 3-4 times pinnate manner, with alternate, opposite or irregularly set, patent branches, often slightly flexouse, the lower ones longer than the upper, becoming gradually shorter above and similarly loaded with lesser sorts of ramuli, 10-25 cm. long, mostly 10-15 and the breadth of 0.5-2 mm. Colour purplish red. Substance cartilaginous. Common along both coasts from Kyushyu to Kinkwazan. Used for making Japanese seaweed jelly.

Acanthopeltis japonica *Okam.*

"Yuikiri" or "Torinoasi."

Pl. XCIX, fig. 4.　×1

Okam. Illustr. of Mar. Alg. of Japan, Vol. I, No. 2, p. 15, Pl. VI.

Plant cylindrical, much branched in alternate or somewhat dichotomous manner, 5-20 cm. high, 2-3 mm. thick, all the segments closely furnished with disk-shaped, suborbicular ramuli which are somewhat spiral in the order of insertion, about 3 mm. broad, amplexicaul at the base, with simple or branched setaceous processes on both surfaces. Colour purplish-red. Substance cartilaginous. In deep waters from Kyushyu to Prov. Kadusa. Used for making Japanese seaweed jelly.

Gymnogongrus flabelliformis *Harv.*

"Okitu-nori."

Pl. XCIX, fig. 5.　×1

Harv. in Gray's List of Japanese Plant, p. 332; Okam. Icon. Japanese Algae, Vol. IV, p. 128, Pl. CLXXXI-CLXXXII.

Fronds narrow-linear, compressed, many times regularly dichotomo-flabellate, closely forking with segments erecto-patent, standing on roundish axils, attaining the height of 4-8 cm. with the breadth of 1-1.5 mm.; margin with or without proliferations which are either simple or once or 2-3 times forked; apex obtuse or pointed, often emarginated or bifid. Colour vinoso-purple. Substance cartilaginous Common. Used as sizing for cloth.

Ahnfeltia concinna *J. Ag.*

"Saimi."

Pl. XCIX, fig. 6.　×1

J. Ag. Sp. Alg., II, p. 312; Okam. Icon. of Japanese Alg., Vol. I, p. 173, Pl. CXCI, fig. 1-7.

Fronds erect, horny, subcylindrical, 5-15 cm. high, 1-2 mm. in diam., substipitate for a more or less longer distance from the base, usually divaricately branched in a dichotomous manner, often corrugato-flexuose, and provided with proliferous branches, which often arise fasciculately or arranged in secund manner. From Ogasawaradima to Prov. Sagami and Idu. Used as sizing for cloth.

Iridaea laminarioides var. **cornucopiae** *J.Ag.*

"Ginnanso."

Pl. XCIX, fig. 7.　$\times {}^{1}/_{3}$

Yendo Notes on Alg. new to Japan, VI. p. 78 (Bot. Mag., Tokyo, Vol. XXXI,) p. 78, fig. 1. *Ir. cornucopiae* P. et R. Illustr. Alg., p. 18, Pl. XXXVIII. f, b.

Plant flat, leaf-like, obovate or oblong, simple or lobed, with roundish apex, tapering below into more or less elongated cuneate stem, 10-20 cm. high, 5-15 cm. broad, with shining lustre. Colour vinoso-red. Substance leathery. Used as cement for Japanese walls and as sizing for cloth.

Gigartina tenella *Harv.*

"Suginori."

Pl. XCIX, fig. 8.　×1

Harv. Char. of New Alg. in Proceed. Amer. Acad., IV, 1859, p. 331; Okam. Icon. Japanese Alg. Vol. I, p. 159, Pl. XXXIII, f. 1-8.

Plant compressed, linear, irregularly pinnate with alternate and opposite branches intermixed, patent, and tapering to sharpish point, often strongly recurved; plant attains a height of 5-12 cm. with the breadth of 2-3 mm. Colour dark purplish. Substance cartilaginous. Common. Used as sizing for cloth.

Grateloupia flabellata *Holm.*

"Komenori"

Pl. XCIX, fig 9.　×1

Holm. New Marine Algae from Japan, p. 254, Pl. IX, f 3 a-b.

Plant dwarf, linear, compressed, regularly and repeatedly dichotomous, flabellate with the segments erect on narrow axils ending in blunt or ligulate or often bifid apex. 3-5 cm. high, 3-4 mm. broad. Colour greensih purple. Substance cartilaginous. Common. Edible and also used as sizing for cloth.

Gracilaria confervoides (*L.*) *Grev.*

"Ogonori."

Pl. XCIX, fig. 10-11.　×1

Grev. Alg. Brit. p. 123; Okam. Icon. of Japanese Alg., Vol. IV, p. 1, Pl. CLI.

Fronds filiform, densely branching on all sides alternately with erect or patent branches, 5-20 cm. some 60 cm. or, more long, usually less than one mm. in diam., or, in some, 2-3 mm.; branches elongated, gradually tapering toward apex, often slightly flexuose, beset with similar but shorter ones, laterally loaded with mostly secund branchlets; branches of every order strongly constricted at base and tapering above (fig. 10). Cystocarps hemispherical, sessile on branches (fig. 11). Colour purplish brown or greenish. Substance cartilaginous. Common. Edible, also made into paste as well as mixture for making Japanese seaweed jelly.

Gracilaria compressa (*Ag.*) *Grev.*

"Shiramo."

Pl. XCIX, fig. 12　×1

Grev. Alg. Brit. p. 125; Okam. Icon. Japanese Alg. Vol. V, p. 160, Pl. CCXLII, fig. 5-10.

Frond filiform or cylindrical, 15-30 cm. high, 2-3 mm. thick, 2-3 times pinnately branched; branches elongated, arising alternately with very patent and round axils, here and there with subdichotomous portions, somewhat flexuose, and furnished with branchlets arranged in subsecund manner; all the branches tapering to fine apex, rising from broader and not constricted base. Common. Edible and made into jelly.

Gracilaria Textorii *Sur.*

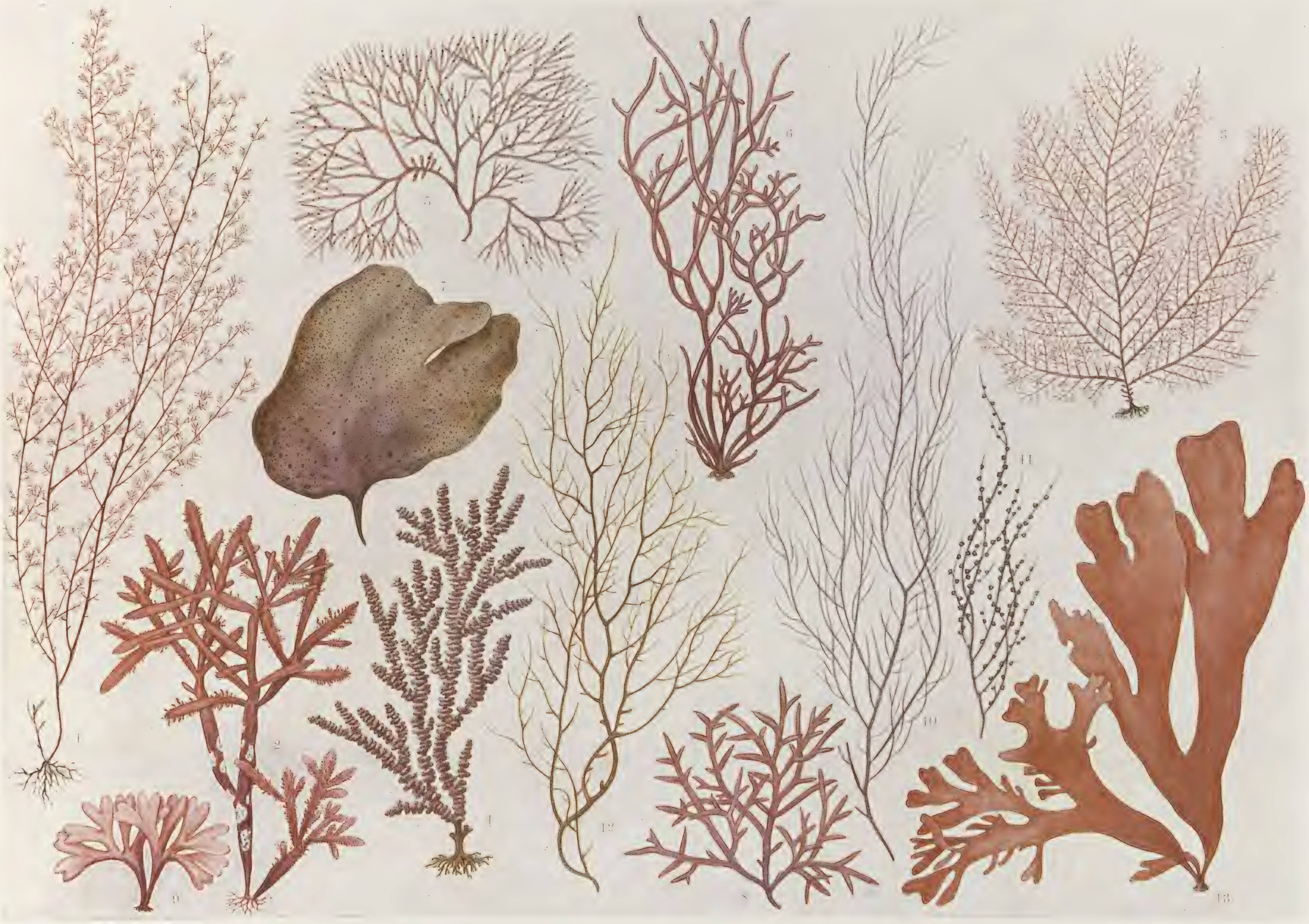
"Kabanori."

Pl. XCIX, fig. 13.　×1

Sur. Index Praecurs. p. 4; Okam. Illustr. of Mar. Alg. of Japan, Vol. I, no. 5, p. 66, Pl. XXIII.

Plant flat, band-shaped, coriaceous, dichotomously or subpalmately branched with broad, linear, patent segments, having round axils; segments 1-3 cm. broad ending in blunt or ligulate or bifid apex, with entire margin, 10-20 cm. high Colour purplish. Substance soft cartilaginous. Common. Used as food by local people.

第九十九圖版 PL. XCIX



キヨウノヒモ

Grateloupia lancifolia (*Harv.*) *Okam.*

ヒモノリ

（第百圖版　第十圖）　×1

岡村，日本藻類圖譜，I 卷，170 頁，34 圖版，9–14 圖.

體は扁壓にして稍厚く，披針狀をなし，莖は短き單條なる又は 1 回分岐せる圓柱狀をなし，體の長さ 15–30 cm. 幅 1.5–6 cm. あり，稀に單條，通常遠く距りてくびれたり．幼き時は全く副枝なくして平坦なれども，後緣邊及兩面より短き長卵形又は舌狀の小枝を副出し，小枝は基部くびれたり．色は濃き紫色にして光澤あり．質は粘滑にして柔き軟骨質なり．各地に普し．布類の糊料とす．

エゴノリ

Ceramium Hypnaeoides (*J. Ag.*) *Okam.*

オキウド

（第百圖版　第十一圖，第十二圖）　×1

Campylaephora Hypnaeoides J. Ag. 岡村，日本藻類圖譜，II 卷，101 頁 79 圖版，1–13 圖.

體は若き時は絲狀にして，美しく叉狀に分岐すれども（第十一圖）漸次太くして圓柱狀となり，不規則に叉狀に分岐し，10–20 cm. 高く，尙ほ後には甚だ大なる團塊をなして枝の頂端下に太くなりて鈎狀に屈曲せる部分を作り之に依てホンダワラ類の枝に卷絡む（第十二圖）．日本海に普通なり．食用とし，又寒天材料として混用す．

ハナフノリ

Gloiopeltis cervicornis (*Sur.*) *Schm.*

（第百圖版　第十三圖）　×1

岡村，日本藻類圖譜，II 卷，160 頁，94 圖版.

體は矮小にして喬木の如く密に分岐し，稍圓柱狀又は扁壓し，密に叉狀樣羽狀に分岐し，1.5–4 cm. 高く，太さ 1–1.5 mm. あり圓き塊をなし，枝の各方面より短き刺狀の不規則なる小枝を生ず．色は濃き紫色にして略ぼ黑色となる．質は軟骨質なり．高潮線以上の岩上に生ず．綿布類の糊料とす．

カイニンサウ

Digenea simplex (*Wulf.*) C. *Ag.*

マクリ

（第百圖版　第十四圖）　×1

岡村，日本海藻圖說，I 卷，第二册，三二頁，9 圖版.

體は圓柱狀にして，5–15 cm. 高く，2–3 mm. 太く，叉狀樣互生に不規則に分岐し，各部は直立せる如く又廣開せる如く，密に絲狀の，硬き剛毛の如き小枝を以て蔽はるゝ狀恰も狐の尾の如く小枝は概ね單狀にして 5–10 叉は 15 mm. の長さあり．色暗紫色にして綠色となる．質は硬くして稍軟骨質なり．琉球邊より土佐に到る．蛔虫の驅除劑として特效あり．

トサカノリ

Meristotheca papulosa *J. Ag.*

（第百圖版　第十五圖）　×1

Eucheuma papulosa Cott. et Yendo，岡村，日本藻類圖譜，V 卷，131 頁，234–235 圖版，11–14 圖.

體は鮮美にして，扁平，膜狀，不規則なる叉狀に分岐し，各部は幅濶き枝を爲し漸次上方に細し；體の高さ 20–30 cm. 幅 1–5 cm. あり，不規則なる短き副枝を有する狀恰も鷄冠を見るが如し故に名あり；體の表面は老成せるものに於ては疣狀の突起を有することあり．色は美しき鮮紅色にして往々褐色の斑點を存す．質は老成する時は稍厚く多肉と成る．九州より安房に到る太平洋沿岸に普通なり．食用とし支那に輸出す．

Grateloupia lancifolia (*Harv*) *Okam.*

"Himonori," "Kyonohimo."

Pl. C, fig. 10.　×1

Okam. Icon. Japanese Algae, Vol. I, p. 167, Pl. XXXIV, f. 9-14.

Plant complanato-flat, thickish, lanceolate, with short simple or once forked almost cylindrical stem, 15-30 cm. long, 1.5-6 cm. broad, rarely simple, usually constricted at long intervals. When young, entirely free from proliferations and flat, but afterward densely proliferating from margins and surfaces with short elongated oval or ligulate branchlets which are constricted at the base. Colour dark vinoso-red with shining lustre. Substance lubricous and soft cartilaginous. Common. Used as the sizing of cloth.

Ceramium Hypnaeoides (*J. Ag.*) *Okam.*

"Egonori"; "Okyudo."

Pl. C, fig. 11-12,　×1

Campylaephora Hypnaeoides J. Ag. in Okam. Icon. Japanese Algae, Vol. II, p. 99, Pl. LXXIX, f. 1-13; Okam. On *Campylaephora hypnaeoides* J. Ag. (Bot. Mag., Tokyo, Vol. XLI, 1927, No 484, p. 365, f. A-B.

Frond filiform, and elegantly dichotomous when young, (fig.11) becoming gradually thick, cylindrical, irregularly branched in dichtomous manner. 10-20 cm. high, more afterward becoming entangled in a very large mass by twisting on the branches of *Sargassum* with thickened and crooked parts beneath the terminal portion of branches (fig. 12). Colour deep-red. Common in the Japan Sea. Edible, also used as a mixture for making Japanese seaweed jelly.

Gloiopeltis cervicornis (*Sur.*) *Schm.*

"Hanahunori."

Pl. C, fig. 13.　×1

Okam. Icon. Japanese Algae, Vol. II, p. 157, Pl. XCIV.

Plant dwarf, dendritic, subcylindrical or compressed, densely branched in dichotomo-pinnate manner, 1.5-4 cm. high, 1-1.5 mm. broad, forming a roundish mass, with short and acute irregular branchlets issuing from all the sides of branches. Colour deep red-violaceous appearing almost black. Substance cartilaginous. Growing on rocks above high tide mark. Used as sizing for cloth.

Digenea simplex (*Wulf.*) *C. Ag.*

"Kaininso," "Makuri."

Pl. C, fig. 14.　×1

Okam. Illustr. of Mar. Algae of Japan, Vol. I, no. 2, p. 25, Pl. IX.

Plant cylindrical, 5-25 cm. high, 2-3 mm. thick, irregularly branched in an dichotomo-alternate manner, with segments between erect and patent, thickly covered with a profusion of filiform, mostly simple, harsh, bristle-like branchlets of the length of 5-10 or 15 mm. Colour dark purplish brown, fading to greenish. Substance stiff and subcartilaginous. In warmer parts of the country Used as a vermifuge for *Ascaris*.

Meristotheca papulosa *J. Ag.*

"Tosakanori."

Pl. C, fig. 15.　×1

Eucheuma papulosa Cott. et Yendo; Okam. Icon. Japanese Algae, Vol. V, p. 123, Pl. CCXXXIV-V, f. 11-14.

Plant very beautiful, flat, membranceous, divided into many broader segments in an irregularly dichotomous manner, becoming gradually narrower above. Plant attaining a height of 20-30 cm. with the breadth of 1-5 cm. furnished with irregular, short proliferations; surface becoming rough when aged with warty protuberances. Colour beautiful crimson-red, often variegated with brownish specks. Substance thick and fleshy when old. Common in the Pacific from Kyushyu to Prov. Boshyu. Edible, and exported to China.

マフノリ

Gloiopeltis tenax (*Turn.*) *J. Ag.*

スジフノリ　キヌフノリ（九州）

（第百圖版　第一圖）　×1

體は絲狀，圓柱狀，多少規則正しく叉狀に分岐し，腋廣く，老成せる體の下部は往々扁壓し，各部くびれることなく，漸次枝端の方に細く，高さ 10–20 cm. 幅 1–3 mm. に到る．絹布の糊料とす．

フクロフノリ

Gloiopeltis furcata *Post. et Rupr.*

フノリ　ブツ（九州）

（第百圖版　第二圖）　×1

岡村，日本藻類圖譜，V 卷，175 頁，244 圖版．

體は中空にして圓柱狀，稀に單葉，通常不規則に叉狀に分岐し，處々くびれ，殊に分岐點に於て細くなり，枝端鈍圓又は細く，3–10 cm. 高く，時に 15 cm. 以上に達し直徑 2–5 mm. あり．色は濃紫色なり．質は柔かき軟骨質なり．各地に普し．絹，綿布類の糊料とす，又婦人の髮を洗ふに用ふ．

ウミゾウメン

Nemalion vermiculare *Sur.*

（第百圖版　第三圖）　×1

岡村，日本藻類圖譜，IV 卷，29 頁，158 圖版，10–16 圖．

體は單條又は稀に分岐し，恰もミミズを見るが如く極めて柔軟にして，粘滑，長さ 10–20 cm. 太さ 1.5–2 mm.，あり濃き紫色にして老成せるものは黃色を帶ぶ．日本海沿岸に普通なり．食用とす．

コトヂツノマタ

Chondrus elatus *Holm.*

ナガツノマタ　カイサウ（千葉縣）

（第百圖版　第四圖）　×1

岡村，日本藻類圖譜，IV 卷，40 頁，160 圖版，6–14 圖．

體は高く，扁圓；線狀，高さ 15–25 cm. 太さ 3–4 mm.，體の半以上の部分より 5–6 回叉狀に分岐し，腋圓く，廣開し，枝部鈍頭又は二裂し，兩緣より單條又は一回分岐せる短き小枝を殆ど水平に出す．靜岡縣より宮城縣に到る沿岸に多し．壁土の糊料とし，特に千葉縣にては之にて寒天を作りて食用とす，海藻蒟蒻又黑豆腐の名あり．

ツノマタ

Chondrus ocellatus *Holm.*

トチヤカノリ（日本海沿岸）

（第百圖版　第五，六圖）　×1

體は形狀及大さを異にす．高潮線附近に生ずるものは單條にして篦狀をなし又は一回分岐し溝狀に反り，高さ 3–6 cm. 幅 3–10 cm. あり．之を小股（コマタ）と稱す（第五圖）．產所の深さ漸く增すに從つて體は漸次大きく且つ廣く數回叉狀に分れ廣き圓き腋を以て開き，各部は楔形を爲し兩緣より單條又は分岐せる短き楔形の副枝を出し，體の高さ 10–15 cm. 幅 1–3 cm. を普通とし時に長さ 60 cm. 幅 10 cm. に達す（之を眞正の大葉角股と稱す．然れども普通はタンバノリを之と誤りてオホバツノマタと稱す）．九州より函館に到る太平洋沿岸及日本海に普通なり．壁の糊料とし又綿布の糊料とす．

アサクサノリ

Porphyra tenera *Kjellm.*

ノリ

（第百圖版　第七圖）　×$^1/_3$

體は葉狀，薄く柔かき膜狀にして，殆ど柄なく，披針狀又は倒卵形披針狀にして往々不規則に分裂し，強く波狀の襞をなし高さ 20–30 cm. 幅 10–15 cm. あり，青紫色なり．乾海苔として鮓其他廣く食用とすること人の知る所なり．東京灣，伊勢灣，廣島灣，朝鮮等にて養殖すること亦人の知る所なり．

カタノリ

Grateloupia divaricata *Okam.*

（第百圖版　第八圖）　×1

岡村，日本藻類圖譜，III 卷，57 頁，116–117 圖版，12–18 圖．

體は線狀にして貫通せる一條の幹を有し，7–20 cm. 高く，稀に 30 cm. 以上に達し扁壓にして 1–1.5 mm. の幅を有し，時に羽狀に分岐し枝は長く，廣開し又更に羽狀の枝を出す，枝は頂端叉狀を爲す；時としては不規則に叉狀に分岐し其兩側より羽狀の副枝を出す；枝は總て漸次枝端の方に細し．色は濃紫色なり．質は軟骨藻なり日本海に普し．綿布の糊料とし又地方に依り食用とす．

ムカデノリ

Grateloupia filicina (*Wulf.*) *C. Ag.*

（第百圖版　第九圖）　×1

體は細き線狀にして扁壓，單條又は往々 1–2 回叉狀をなせる主軸あり其兩側より美しく列びて廣開せる枝を羽狀に出し，枝は略ぼ同一の長さにして細き頂端に了る；枝又同樣の形狀にして同樣に列せる小枝を有す．色は紫色なり．質は軟く粘滑なり．各地に普し．布類の糊料とす．

Gloiopeltis tenax (*Turn.*) *J. Ag.*

"Mahunori."

Pl. C, fig. 1.　×1

Sur. Illustr. Esp. Gloiopeltis, p. 29, t. 1, Pl. XIV-XVIII, XX, XXI.

Fronds filiform, cylindrical, more or less regularly dichotomous, with patent axils, often becoming compressed in age on the lower portion of frond, without constriction, very gradually tapering toward apex, 10-20 cm. high, 1-3 mm. broad. Colour deep vinoso-red. Substance cartilaginous. From Kyushyu to Prov. Idu. Used as the sizing for silk.

Gloiopeltis furcata *Post. et Rupr.*

"Hukuro-hunori" or "Hunori."

Pl. C, fig. 2.　×1

Okam. Icon. Japanese Alg., Vol. V, p. 164, Pl. CCXLIV; *Gloip. coliformis* and *G. intricata* Sur. Alg. Japan, p. 33, t. XX.

Frond tubular and cylindrical, rarely simple, usually divaricato-dichotomous, here and there narrowed as if constricted mostly in forked portions, tapering to a blunt or slender apex, 3-10 cm. high, sometimes 15 or more cm long and 2-5 mm. in diameter. Colour deep vinoso-red. Substance soft cartilaginous. Common. Used as the sizing for cloth.

Nemalion vermiculare *Sur.*

"Umizomen."

Pl. C, fig. 3.　×1

Sur. Illustr. Alg. du Japon I, p. 91, t. XXXIV; Okam. Icon. Japanese Alg. Vol. IV, p. 28, Pl. CLVIII, fig. 10-16.

Frond simple or sparingly branched, vermiform, very soft and slippery, 10-20 cm. long, 1.5-2 mm. thick, deeply vinoso-red, fading to yellowish in age. Common along the coast of the Japan Sea. Edible.

Chondrus elatus *Holm.*

"Kotodi-tunomata," "Nagatunomata."

Pl. C, fig. 4.　×1

Holmes, On Mar. Alg. from Japan, 1895, p. 252, t. IX, 1; Okam. Icon. Japanese Alg. Vol. IV, p. 38, pl CLX, fig 6-14.

Plant high, tereti-compressed, linear, 15-25 cm. high, 3-4 mm. thick, 5-6 times distantly dichotomous above the middle of the whole length, with widely parted and roundish axils, ending in an obtuse or bifid apex, with or without short, simple or once-forked ramuli arising from margin in almost horizontal position. Common along the Pacific from Shizuoka-Ken to Miyagi-Ken. Also made into jelly and eaten in Tiba-Ken. Used as cement of Japanese wall.

Chondrus ocellatus *Holm*

"Tunomata." "Totyakanori."

Pl. C, fig. 5-6.　×1

Holm. On the Mar. Alg. from Japan (1895), p. 252, t, IX, fig. 2.

Plants very variable in form and size. Those growing on rocks near high tide simple, spatulate or once forked, canaliculated, 3-6 cm. high, 3-10 mm. broad (fig. 5), gradually becoming larger and broader as they grow in deeper waters, repeatedly dichotomous with patent and round axils, in subcuneate segments, often furnished with simple or forked short cuneate proliferations from both sides, attaining the hight of 10-15 cm. and breadth of 1-3 cm., becoming longer and broader as far as 60 cm. by 10 cm. Common along the Pacific coast from Kyusyu to Hakodate, and in the Japan Sea. Used as cement for Japanese walls, and as sizing for coarse cloth.

Porphyra tenera *Kjellm.*

"Nori" or "Asakusa-nori."

Pl. C, fig. 7.　×$^1/_3$

Plant leafy, thin and delicate membranaceous, almost sessile, lanceolate or obovato-lanceolate, often irregularly lobed, deeply undulato-folded, 20-30 cm. high, 10-15 cm. broad, atroviolaceous. Extensively cultivated and also gathered from natural beds. Commonly used for "Sushi" (=Japanese Sandwich) and in various other ways. Bay of Tokyo, Bay of Ise, Hirosima and Chosen.

Grateloupia divaricata *Okam.*

"Katanori"

Pl. C, fig. 8.　×1

Okam. Icon. Japanese Alg., Vol III, p. 55, Pl. CXVI-CXVII, fig. 12-18.

Plant linear, with a simple percurrent stem, 7-20 cm. high, rarely 30 cm. or more, compressed and of equal breadth of 1-1.5 mm, sometimes pinnately branched with elongated, patent, again pinnated branches which are often forked at apex; sometimes dichotomously branched in divaricated manner with pinnate proliferations from sides, all the branches gradually tapering upward to a fine point. Colour dark-red. Substance cartilaginous. Common along the Japan Sea. Used as paste for sizing of cloth, and also eaten by local people.

Grateloupia filicina (*Wulf.*) *C. Ag.*

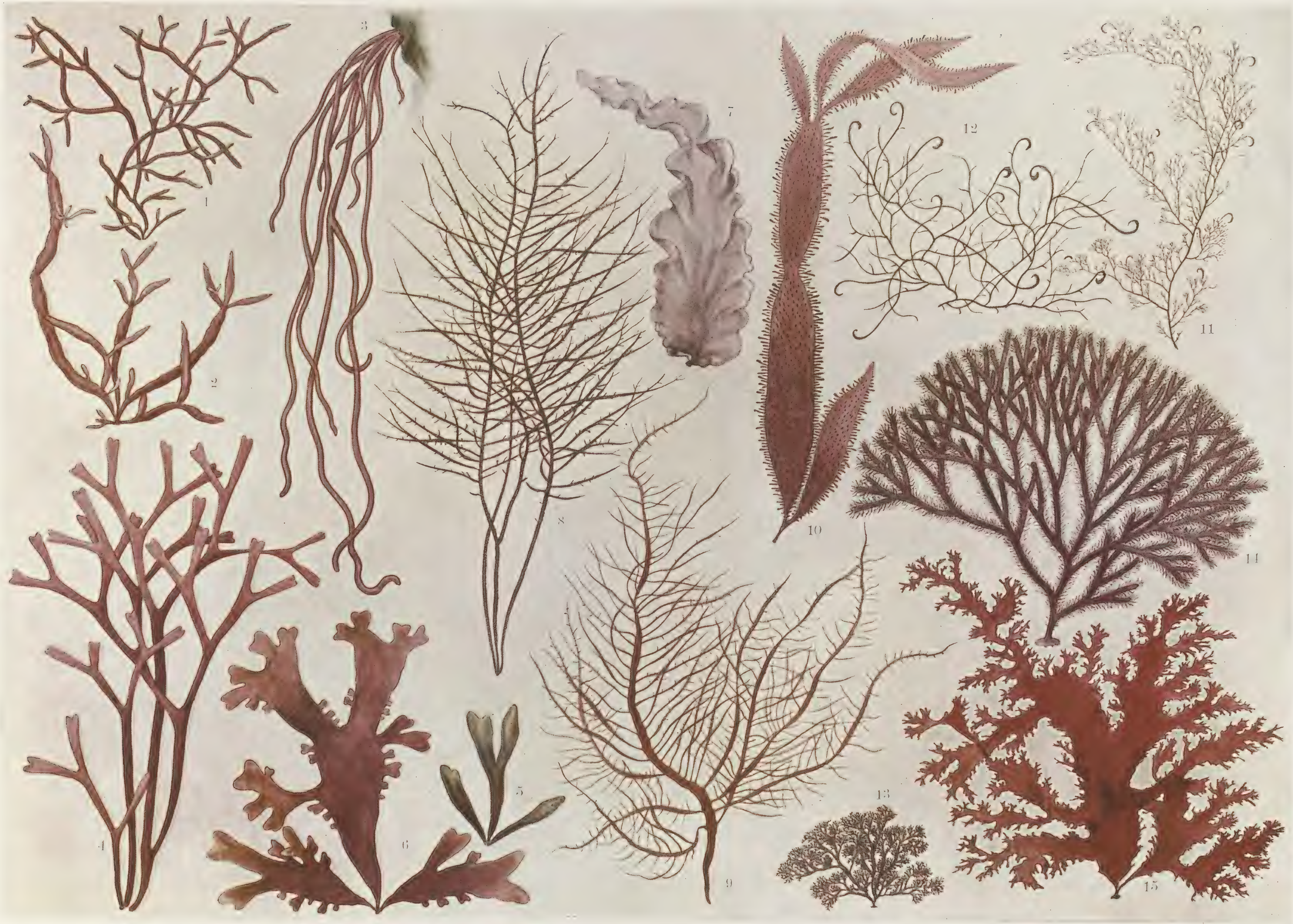
"Mukadenori"

Pl. C, fig. 9.　×1

Harv. Phyc. Brit. tab. C.

Plant narrow-linear, compressed, with a simple or often once or twice furcated percurrent main segments from both sides of which elegantly branched segments arise in patent and pinnate manner, with branches of almost equal length and tapering to slender apex; branches also furnished with similarly shaped and arranged branchlets. Colour purple. Substance soft and gelatinous Common. Used as sizing for cloth.

第百圖版　　PL. C.



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